10/634,181

STN - Structure Search 1-23-04

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=> d his

     (FILE 'HOME' ENTERED AT 16:47:25 ON 23 JAN 2004)

     FILE 'REGISTRY' ENTERED AT 16:47:32 ON 23 JAN 2004
L1                STRUCTURE UPLOADED
L2              0 S L1
L3                STRUCTURE UPLOADED
L4              0 S L3
L5              0 S L3 FULL

=> d l3
L3 HAS NO ANSWERS
L3                STR
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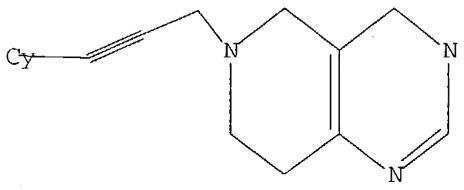


Structure attributes must be viewed using STN Express query preparation.

10/634,181

STN - Structure Search 1-22-04

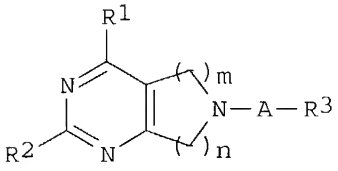
=> d ibib abs hitstr 1-48

L7 ANSWER 1 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:991510 CAPLUS
DOCUMENT NUMBER: 140:42193
TITLE: Preparation of bicyclic pyrimidine derivatives as antiinflammatory agents for treatment of allergic diseases
INVENTOR(S): Arai, Hitoshi; Matsumura, Tsutomu; Ishida, Hiroshi; Yamaura, Yosuke; Aratake, Seiji; Ohshima, Etsuo; Yanagawa, Koji; Miyama, Motoki; Suzuki, Koji; Kawabe, Ari; Nakanishi, Satoshi; Kobayashi, Katsuya; Sato, Takashi; Miki, Ichiro; Ueno, Kimihisa; Fujii, Shinya; Iwase, Miho
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: PCT Int. Appl., 467 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003104230	A1	20031218	WO 2003-JP7200	20030606

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2002-166504 A 20020607
GI



I

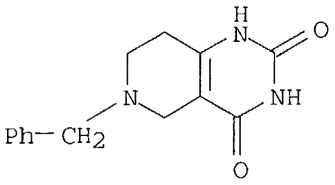
AB The title compds. I [wherein m and n = independently 1-3; R1 = (un)substituted amino; R2 = -B-(CX2)p-R7, (un)substituted piperidinyl, piperazinyl, or amino; B = O CH=CH, C.tplbond.C, or phenylene; p = 1-4; X = H, halo, or (un)substituted alkyl; R7 = (un)substituted amino; A = a single bond, CO, SO2, OCO, OCS, SCO, SCS, (un)substituted NHCO, NHCS, or amino; R3 = H, (un)substituted alkyl, cycloalkyl, alkenyl, alkynyl, aralkyl, aryl, heteroaryl, heterocyclyl, heteroarylalkyl, or heterocyclylalkyl, etc.] or quaternary ammonium salts, or pharmaceutically acceptable salts thereof are prepd. I have an antiinflammatory effect and an effect of controlling the function(s) of TARC and/or MDC and, therefore, are usable in treating and/or preventing various diseases in which T cells participate, for example, allergic diseases, autoimmune diseases, rejection at transplantation, etc. (no data). Formulations

contg. I as an active ingredient were also described.

IT **135481-57-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of bicyclic pyrimidine derivs. as antiinflammatory agents for treatment of allergic diseases)

RN 135481-57-1 CAPLUS

CN Pyrido[4,3-d]pyrimidine-2,4(1H,3H)-dione, 5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



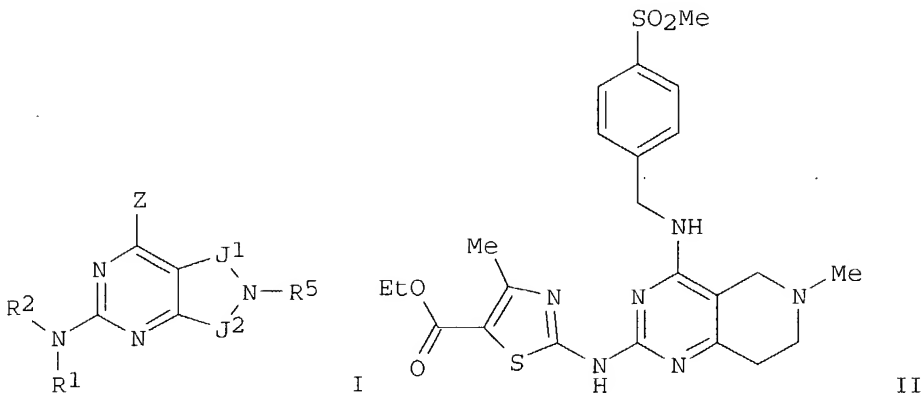
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:796321 CAPLUS
DOCUMENT NUMBER: 139:307784
TITLE: Preparation of fused heterocyclic inhibitors of cAMP phosphodiesterase and their use in treatment of T cell-mediated diseases
INVENTOR(S): Pitts, William J.; Barbosa, Joseph; Guo, Junqing
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 137,508.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003191143	A1	20031009	US 2002-288980	20021106
US 2003092908	A1	20030515	US 2002-137508	20020501

PRIORITY APPLN. INFO.: US 2001-287964P P 20010501
US 2001-299287P P 20010619
US 2002-368752P P 20020329
US 2002-137508 A2 20020501

OTHER SOURCE(S): MARPAT 139:307784
GI



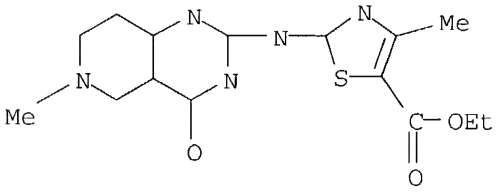
I II

AB The title compds. [I; R1 = H, alkyl; R2 = (substituted) heteroaryl, heterocycle, aryl, aryl fused to heteroaryl or heterocycle; R5 = H, CN, (substituted)alkyl, alkenyl, alkynyl, cycloalkyl, COR6, COOR6, COCOOR6, SO2R6a, etc.; R6 = H, alkyl, alkenyl, etc.; R6a = alkyl, alkenyl, etc.; Z = NR3R4, NR3SO2R4a, OR4, SR4, haloalkyl, halo; R3, R4 = H, alkyl, alkenyl, etc.; R4a = alkyl, alkenyl, etc. ; J1, J2 = C1-3 alkylene but both J1 and J2 are not > C2] and analogs thereof are prepd. which are useful in treating T-cell mediated diseases. E.g., a multi-step synthesis of II is given. Pharmaceutical compn. comprising the compd. I is claimed.

IT **474405-76-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of fused heterocyclic inhibitors of cAMP phosphodiesterase and their use in treatment of T cell-mediated diseases)

RN 474405-76-0 CAPLUS

CN 5-Thiazolecarboxylic acid, 2-[(1,4,5,6,7,8-hexahydro-6-methyl-4-oxopyrido[4,3-d]pyrimidin-2-yl)amino]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)



*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L7 ANSWER 3 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	2003:610269 CAPLUS
DOCUMENT NUMBER:	139:164803
TITLE:	Preparation of condensed heterocyclic compounds as PARP inhibitors
INVENTOR(S):	Ishida, Junya; Hattori, Kouji; Kido, Yoshiyuki; Yamamoto, Hirofumi
PATENT ASSIGNEE(S):	Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE:	PCT Int. Appl., 64 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003063874	A1	20030807	WO 2003-JP708	20030127

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2002-197 A 20020129

OTHER SOURCE(S): MARPAT 139:164803

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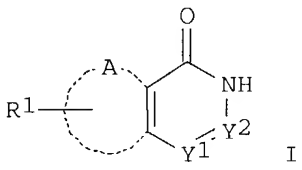


I

AB The title compds. [I; R1 = H, halo, alkyl or alkoxy; A and two adjacent carbon atoms of the six membered ring to be bonded with A form benzene ring, pyridine ring, etc.; Y1:Y2 = N:C(L11R21), C(L12R22):N, CH:C(L13R23), C(L14R24):CH (wherein L11, L12, L13, L14 = alkylene, alkenylene, etc.; R21, R22, R23 and R24 = cyclic amino group, carbocyclic group or amino group which are substituted with (un)substituted Ph); provided that when A and two adjacent carbon atoms of the six membered ring to be bonded with A form benzene ring, then Y1:Y2 = C(L12R22):N, CH:C(L13R23), C(L14R24):CH] having poly(adenosine 5'-diphospho-ribose)polymerase (PARP) inhibitory activity, were prepd. Thus, reacting 4-(4-phenyl-3,6-dihydro-1(2H)-pyridyl)butanimidamide with cyclohexanone-2-carboxylic acid Et ester in the presence of K2CO3 in EtOH afforded 2-[3-(4-phenyl-3,6-dihydro-1(2H)-pyridyl)propyl]-5,6,7,8-tetrahydro-4(3H)-quinazolinone which showed IC50 of < 0.5 .mu.M against human PARP.

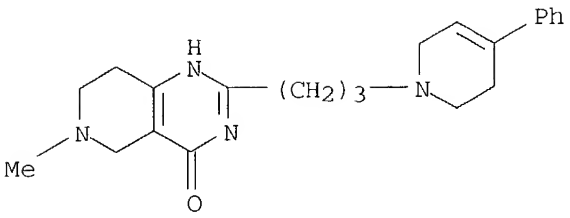
IT **574006-79-4P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of condensed heterocyclic compds. as PARP inhibitors)

RN 574006-79-4 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-[3-(3,6-dihydro-4-phenyl-1(2H)-pyridinyl)propyl]-5,6,7,8-tetrahydro-6-methyl- (9CI) (CA INDEX NAME)

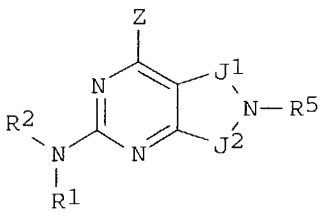


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:849386 CAPLUS
DOCUMENT NUMBER: 137:348408
TITLE: Fused heterocyclic inhibitors of cAMP phosphodiesterase and their use in treatment of T cell-mediated diseases
INVENTOR(S): Pitts, William; Barbosa, Joseph; Guo, Junqing
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002087513	A2	20021107	WO 2002-US14049	20020501
WO 2002087513	A3	20030313		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003104974	A1	20030605	US 2002-135998	20020430

PRIORITY APPLN. INFO.: US 2001-287964P P 20010501
US 2001-299287P P 20010619
US 2002-368752P P 20020329
OTHER SOURCE(S): MARPAT 137:348408
GI



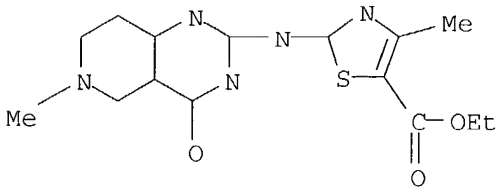
I

AB Fused heterocyclic cAMP phosphodiesterase inhibitors (I; R1 = H, alkyl; R2 = (substituted)heteroaryl, heterocycle, aryl, aryl fused to heteroaryl or heterocycle; R5 = H, CN, (substituted)alkyl, alkenyl, alkynyl, cycloalkyl, etc., COR6, COOR6, COCOOR6, SO2R6a; R6 = H, alkyl, alkenyl, etc.; R6a = alkyl, alkenyl, etc.; Z = NR3R4, NR3SO2R4a, OR4, SR4, haloalkyl, halo; R3, R4 = H, alkyl, alkenyl, etc.; R4a = alkyl, alkenyl, etc. ; J1, J2 = C1-3-alkylene but both J1 and J2 are not > C2) and analogs thereof are provided which are useful in treating T-cell mediated diseases. Thus, many I compds. such as I (R1 = H, R2 = 4-methyl-5-thiazolecarboxylic acid Et ester-2-yl; R5 = Me; J1 = CH2; J2 = CH2CH2; Z = {[4-(methylsulfonyl)phenyl]methyl}amino) were prepd.

IT **474405-76-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fused heterocyclic inhibitors of cAMP phosphodiesterase and their use in treatment of T cell-mediated diseases)

RN 474405-76-0 CAPLUS

CN 5-Thiazolecarboxylic acid, 2-[(1,4,5,6,7,8-hexahydro-6-methyl-4-oxopyrido[4,3-d]pyrimidin-2-yl)amino]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)



*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L7 ANSWER 5 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	2002:748341 CAPLUS
DOCUMENT NUMBER:	137:286331
TITLE:	Silver halide photographic material and method of processing the same
INVENTOR(S):	Miyoshi, Masanori
PATENT ASSIGNEE(S):	Konica Co., Japan
SOURCE:	Jpn. Kokai Tokkyo Koho, 61 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1

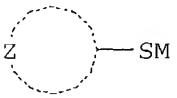
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002287300	A2	20021003	JP 2001-90006	20010327

PRIORITY APPLN. INFO.: JP 2001-90006 20010327

OTHER SOURCE(S): MARPAT 137:286331

GI



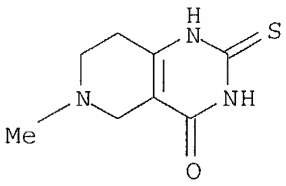
I

AB The Ag halide photog. material has .gtoreq.1 photosensitive Ag halide emulsion layer on one side of a support and contains compds. represented by Rf-(L1)m-(Y1)n-X (Rf = aliph. group contg. .gtoreq.1 F; L1 = divalent bonding group; Y1 = alkylene oxide, alkylene; X = H, OH, anionic group, cationic group; m = integer 0-5; and n = integer 0-40), Rf-(O-Rf')n1-L2-Xm1' (Rf' = alkylene contg. .gtoreq.1 F; L2 = bonding group; X' = OH, anionic group, cationic group; and n1, m1 = integer .gtoreq.1), [(Rf''O)n2-(PFC)-CO-Y2]k-L3-Xm2'' (Rf'' = C1-4 perfluoroalkyl; (PFC) = perfluoroalkylene; Y2 = bonding group contg. O or N; L3 = bonding group; X'' = water-sol. polar group; n2 = integer 1-5; k = integer 1-3; and m2 = integer 1-5), and I (Z = N-contg. heterocyclyl; M = H, alkali metal, alk. earth metal, ammonium cation). The Ag halide photog. material contains a hydrazine deriv. as a contrasting agent. The processing uses a developer contg. R1(OM1)C=C(OM2)(X)kR2 (R1,2 = alkyl, amino, alkoxy, alkylthio; k = 0, 1; X = CO, CS; M1,2 = H, alkali metal), and is completed in a dry-to-dry processing time 10-60 s. The use of above compds. showed little Ag stains during the development of the Ag halide photog film used for plate making.

IT **154115-14-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(silver halide photog. emulsion layer from)

RN 154115-14-7 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2,3,5,6,7,8-hexahydro-6-methyl-2-thioxo-(9CI) (CA INDEX NAME)



L7 ANSWER 6 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:711623 CAPLUS

DOCUMENT NUMBER: 136:53725

TITLE: One pot synthesis of fused pyrimidines from 2-[N-(methylthiothiocarbonyl)amino]acetate

AUTHOR(S): Chowdhury, A. Z. M. Shaifullah; Shibata, Yasuyuki; Morita, Masatoshi; Kaya, Kunimitsu; Sano, Tomoharu

CORPORATE SOURCE: Environmental Chemistry Division, National Institute for Environmental Studies, Tsukuba, 305-0053, Japan

SOURCE: Heterocycles (2001), 55(9), 1747-1757
CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

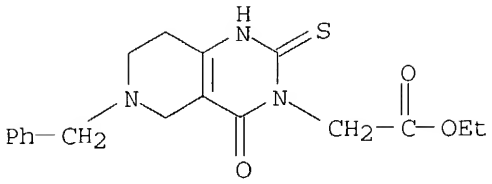
LANGUAGE: English

AB A variety of 3-substituted fused pyrimidines are readily obtained from the 2-amino esters with 2-[N-(methylthiothiocarbonyl)amino]acetate (I). Condensed imidazo[1,2-c]pyrimidine ring system was also constructed in a one-pot process by reacting heteroarom. 2-amino nitriles with I, obtaining a no. of novel tri- and tetracyclic compds.

IT **332097-92-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(one pot synthesis of fused pyrimidines from [N-(methylthiothiocarbonyl)amino]acetate)

RN 332097-92-4 CAPLUS

CN Pyrido[4,3-d]pyrimidine-3(2H)-acetic acid, 1,4,5,6,7,8-hexahydro-4-oxo-6-(phenylmethyl)-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)



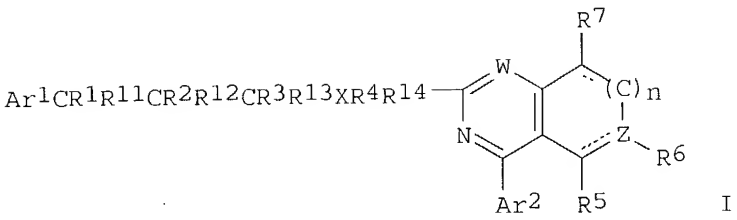
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:453065 CAPLUS
DOCUMENT NUMBER: 135:46199
TITLE: Bicyclic inhibitors of glycogen synthase kinase 3
INVENTOR(S): Nuss, John M.; Zhou, Xiaohui A.
PATENT ASSIGNEE(S): Chiron Corp., USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044246	A1	20010621	WO 2000-US34049	20001214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1240168	A1	20020918	EP 2000-989272	20001214
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003516991	T2	20030520	JP 2001-544736	20001214
US 2001044436	A1	20011122	US 2000-738066	20001215
US 2003008866	A1	20030109	US 2002-228621	20020826

PRIORITY APPLN. INFO.:
US 1999-172403P P 19991217
WO 2000-US34049 W 20001214
US 2000-738066 A1 20001215

OTHER SOURCE(S): MARPAT 135:46199
GI



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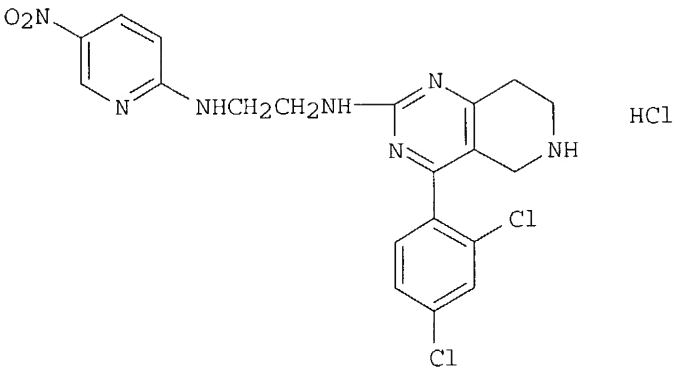


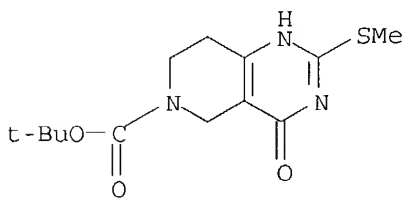
II

AB Bicyclic compds. I [W,X, Y, Z = (un)substituted C, N, S; n = 0-2; Ar1, Ar2 = (un)substituted aryl, aryloxy, arylamino, heteroaryl; R1-R4 = H, (un)substituted OH, alkyl, cycloalkyl, amino, acyl, aryl, heteroaryl; R11-R14 = H, (un)substituted alkyl; R5-R7 = H, OH, halo, CO2H, NO2, CN, (un)substituted alkyl, cycloalkyl, heterocyclyl, alkoxy, aryl, acyl, acyloxy, amino, amido, amidino, imido, arylsulfonyl, arylsulfonamido] were prepd. for use in inhibiting the activity of glycogen synthase kinase (GSK3) in vitro and a treatment of GSK3 mediated disorders in vivo, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency or cancer. Thus, the pyridopyrimidine II was prepd. from Me 4-oxo-3-piperidinecarboxylate in 7 steps. I have IC50 against GSK3 of .ltoreq. 1 .mu.M.

IT **344958-26-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of pyridopyrimidines as inhibitors of glycogen synthase kinase 3)

RN 344958-26-5 CAPLUS

CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-2-(methylthio)-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

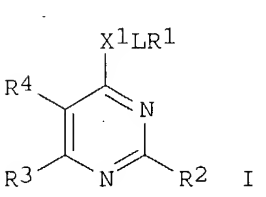


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:338503 CAPLUS
DOCUMENT NUMBER: 134:340517
TITLE: Preparation of heterocycles containing a 4-substituted pyrimidine subunit for pharmaceutical use as mGluR1 antagonists
INVENTOR(S): Ambler, Samantha Jayne; Baker, Stephen Richard; Clark, Barry Peter; Coleman, Darrell Stephen; Foglesong, Robert James; Goldsworthy, John; Jagdmann, Gunnar Erik, Jr.; Johnson, Kirk Willis; Kingston, Ann Elizabeth; Owton, William Martin; Schoepp, Darryle Darwin; Hong, Jian Eric; Schkeryantz, Jeffrey Michael; Vannieuwenhze, Michael Scott; Zia-Ebrahimi, Mohammad Sadegh
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 237 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032632	A2	20010510	WO 2000-US26261	20001019
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1230225	A2	20020814	EP 2000-971987	20001019
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: US 1999-162900P P 19991101
WO 2000-US26261 W 20001019
OTHER SOURCE(S): MARPAT 134:340517
GI



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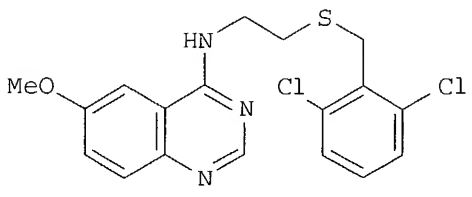


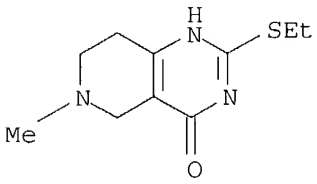
II

AB Heterocycles contg. a 4-substituted pyrimidine subunit, such as I [R1 = carbocyclyl, heterocylyl; R2 = H, CN, SCH2CN, halogen, alkylthio, alkoxy, alkylsulfonyl, alkylamino, alkylsulfinyl, etc.; R3, R4 = alkyl; R3R4 = fused heterocycle, such as S(CH2)3, CH2O(CH2)2, CH:CHS, or fused carbocycle, such as CH:CHCH:CH, (CH2)4; L = alkylene or heteroalkylene linking group; X1 = O, NH], were prepd for pharmaceutical use as mGluR1

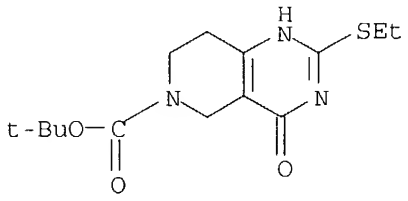
antagonists for treatment of migraine. Thus, quinazolinine II was prepd. in three steps, which included cyclization of 2-amino-5-methoxybenzoic acid with formamidine to form 6-methoxy-4(1H)-quinazolinone, chlorination with phosphorus oxychloride to form 4-chloro-6-methoxyquinazoline followed by amination with 2-(2,6-dichlorobenzylthio)ethylamine. The prepd. pyrimidines were tested for mGluR1 and mGluR5 metabotropic glutamate receptor antagonist activity and were found to be 10 fold selective for the mGluR1 receptor.

IT **1081-21-6P 338740-07-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of heterocycles contg. a 4-substituted pyrimidine subunit for pharmaceutical use as mGluR1 antagonists for treatment of migraine)

RN 1081-21-6 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-(ethylthio)-5,6,7,8-tetrahydro-6-methyl- (9CI) (CA INDEX NAME)



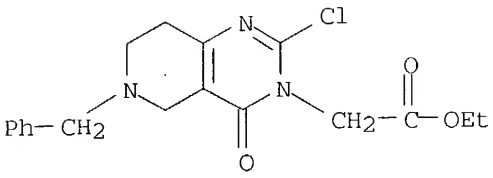
RN 338740-07-1 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 2-(ethylthio)-1,5,7,8-tetrahydro-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



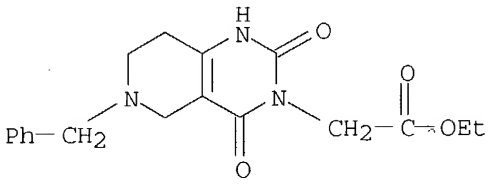
L7 ANSWER 9 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	2001:77786 CAPLUS
DOCUMENT NUMBER:	134:266271
TITLE:	Synthesis and transformations of pyrido[4,3-d]pyrimidines with N-heterocycles moieties
AUTHOR(S):	Chowdhury, A. Z. M. Shaifullah; Shibata, Yasuyuki
CORPORATE SOURCE:	Environmental Chemistry Division, National Institute for Environmental Studies, Tsukuba, 305-0053, Japan
SOURCE:	Heterocycles (2001), 55(1), 115-125 CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER:	Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 134:266271

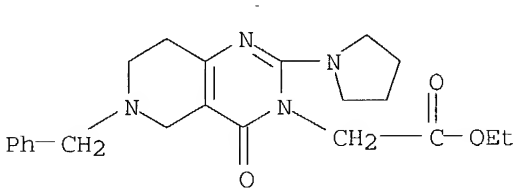
GI



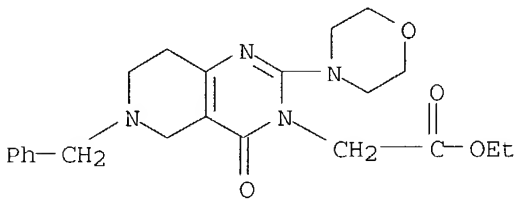
RN 332098-05-2 CAPLUS
CN Pyrido[4,3-d]pyrimidine-3(2H)-acetic acid, 1,4,5,6,7,8-hexahydro-2,4-dioxo-6-(phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)



IT **332097-96-8P 332098-06-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and transformations of pyrido[4,3-d]pyrimidines with N-heterocyclic moieties)
RN 332097-96-8 CAPLUS
CN Pyrido[4,3-d]pyrimidine-3(4H)-acetic acid, 5,6,7,8-tetrahydro-4-oxo-6-(phenylmethyl)-2-(1-pyrrolidinyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 332098-06-3 CAPLUS
CN Pyrido[4,3-d]pyrimidine-3(4H)-acetic acid, 5,6,7,8-tetrahydro-2-(4-morpholinyl)-4-oxo-6-(phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:475943 CAPLUS
DOCUMENT NUMBER: 133:89540
TITLE: Pyridopyrimidinones and benzisothiazole dioxides for use in the prophylaxis and therapy of cerebral

ischemia

INVENTOR(S): Steiner, Gerd; Schellhaas, Kurt; Lubisch, Wilfried; Holzenkamp, Uta; Starck, Dorothea; Szabo, Laszlo; Emling, Franz; Garcia-Ladona, Francisco Javi; Hofmann, Hans-Peter; Unger, Liliane

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 90 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19900544	A1	20000713	DE 1999-19900544	19990111
CA 2359390	AA	20000720	CA 1999-2359390	19991222
WO 2000041697	A1	20000720	WO 1999-EP10275	19991222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140099	A1	20011010	EP 1999-966990	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9916888	A	20011120	BR 1999-16888	19991222
JP 2002534467	T2	20021015	JP 2000-593308	19991222
ZA 2001005473	A	20021003	ZA 2001-5473	20010703
NO 2001003408	A	20010821	NO 2001-3408	20010710
BG 105688	A	20020228	BG 2001-105688	20010710

PRIORITY APPLN. INFO.: DE 1999-19900544 A 19990111
WO 1999-EP10275 W 19991222

OTHER SOURCE(S): MARPAT 133:89540

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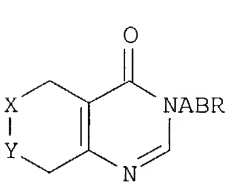

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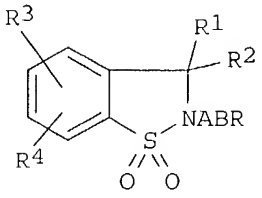

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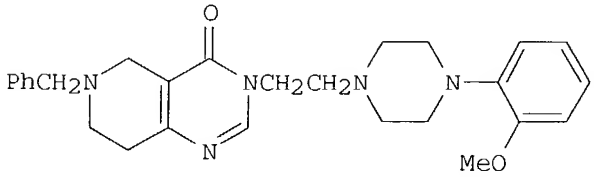


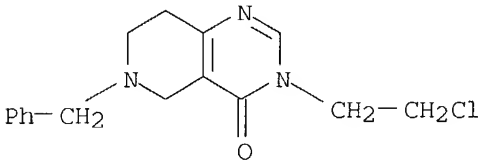
III

AB Title compds. I and II [A = substituted alkylene, alkenylene; B = 4-substituted piperidino, 1,2,3,6-tetrahydropyridino, piperazino, or their 7-membered analogs; R = (un)substituted Ph, naphthyl, indanyl, anthryl, heteroarom.; X = CH2, Y = (un)substituted NH; X = (un)substituted NH, Y = CH2; R1, R2 = alkyl; R3, R4 = H, (un)substituted alkyl, NH2, CO2H, OH, alkoxy, F, Cl, Br, I, CF3, NO2, CN, pyrrolyl, (un)substituted phenylalkyl] were prepd. for use in treating cerebral ischemia and stroke (no data). Thus, Me N-benzyl-4-oxo-3-piperidinecarboxylate was treated with formamidine hydrochloride to give 3,5,7,8-tetrahydro-4-oxo-6-benzylpyrido[4,3-d]pyrimidine which was treated with 1-(2-methoxyphenyl)-4-(2-chloroethyl)piperazine to give the title compd. III.

IT **223609-15-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of pyridopyrimidinones and benzisothiazole dioxides for use in the prophylaxis and therapy of cerebral ischemia)

RN 223609-15-2 CAPLUS

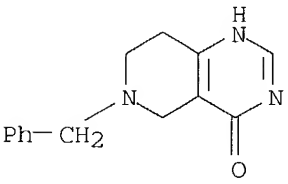
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 3-(2-chloroethyl)-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT **109229-22-3P 223609-09-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of pyridopyrimidinones and benzisothiazole dioxides for use in the prophylaxis and therapy of cerebral ischemia)

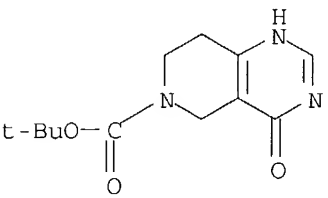
RN 109229-22-3 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

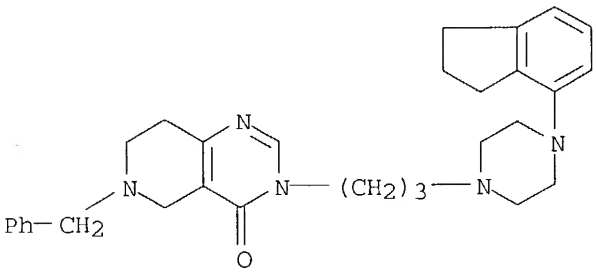


RN 223609-09-4 CAPLUS

CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

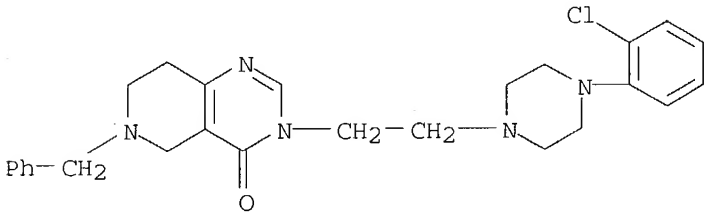


RN 281659-56-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 3-[3-[4-(2,3-dihydro-1H-inden-4-yl)-1-piperazinyl]propyl]-5,6,7,8-tetrahydro-6-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



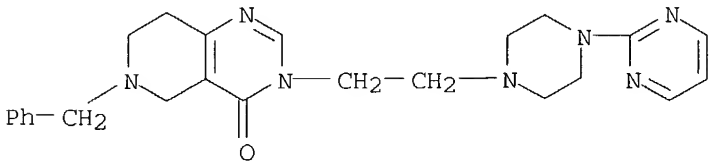
● HCl

RN 281659-57-2 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-5,6,7,8-tetrahydro-6-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



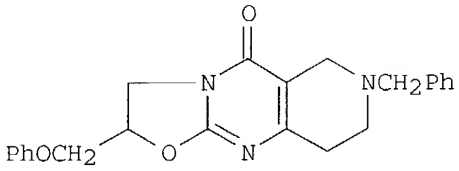
● HCl

RN 281659-58-3 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 5,6,7,8-tetrahydro-6-(phenylmethyl)-3-[2-[4-(2-pyrimidinyl)-1-piperazinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



HCl

ACCESSION NUMBER: 1999:684900 CAPLUS
DOCUMENT NUMBER: 132:49943
TITLE: Reaction between 5-(phenoxymethyl)-2-amino-2-oxazoline and N-benzyl-3-(ethoxycarbonyl)-4-piperidinone hydrochloride: a structural investigation
AUTHOR(S): Forfar, Isabelle; Jarry, Christian; Laguerre, Michel; Leger, Jean-Michel; Pianet, Isabelle
CORPORATE SOURCE: Laboratoire de Chimie Physique et Minerale, Universite Victor Segalen Bordeaux 2 - 146, Bordeaux, 33076, Fr.
SOURCE: Tetrahedron (1999), 55(44), 12819-12828
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:49943
GI



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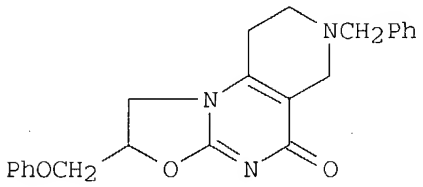


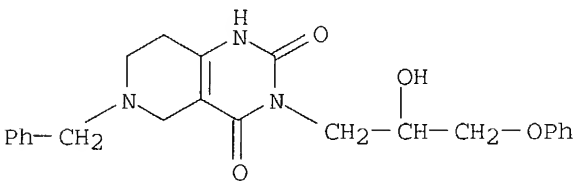
II

AB The title reaction gave oxazolopyridopyrimidinones I and II. Their structures were assigned by comparison of two dimensional NMR spectra (HMBC, NOESY) with the results obtained from theor. calcns. The structure of one related hydrolysis product was established by x-ray crystallog., further confirming the structure assignment.

IT **252911-44-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(isomeric oxazolopyridopyrimidinones by cyclocondensation of (phenoxymethyl)oxazolinamine with oxopiperidinecarboxylate)

RN 252911-44-7 CAPLUS

CN Pyrido[4,3-d]pyrimidine-2,4(1H,3H)-dione, 5,6,7,8-tetrahydro-3-(2-hydroxy-3-phenoxypropyl)-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

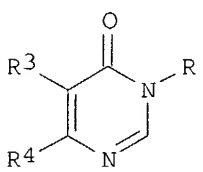


REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:286205 CAPLUS
DOCUMENT NUMBER: 130:311811
TITLE: Preparation of pyridopyrimidinones as serotonin reuptake inhibitors
INVENTOR(S): Lubisch, Wilfried; Dullweber, Uta; Starck, Dorothea; Steiner, Gerd; Bach, Alfred; Emling, Franz; Garcia-Ladona, Francisco Javier; Teschendorf, Hans-Juergen; Wicke, Karsten
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 38 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19747063	A1	19990429	DE 1997-19747063	19971024
CA 2305258	AA	19990506	CA 1998-2305258	19981005
WO 9921857	A1	19990506	WO 1998-EP6305	19981005
W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HR, HU, ID, IL, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9897484	A1	19990517	AU 1998-97484	19981005
AU 748666	B2	20020606		
BR 9812970	A	20000808	BR 1998-12970	19981005
EP 1025100	A1	20000809	EP 1998-951491	19981005
EP 1025100	B1	20020123		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
NZ 503486	A	20010427	NZ 1998-503486	19981005
JP 2001521035	T2	20011106	JP 2000-517967	19981005
AT 212346	E	20020215	AT 1998-951491	19981005
PT 1025100	T	20020731	PT 1998-98951491	19981005
ES 2172222	T3	20020916	ES 1998-951491	19981005
TW 432063	B	20010501	TW 1998-87117332	19981020
ZA 9809664	A	20000425	ZA 1998-9664	19981023
MX 200002601	A	20001109	MX 2000-2601	20000315
BG 104291	A	20010531	BG 2000-104291	20000403
US 6414157	B1	20020702	US 2000-529231	20000410
NO 2000001934	A	20000413	NO 2000-1934	20000413

PRIORITY APPLN. INFO.: DE 1997-19747063 A 19971024
WO 1998-EP6305 W 19981005
OTHER SOURCE(S): MARPAT 130:311811
GI



I

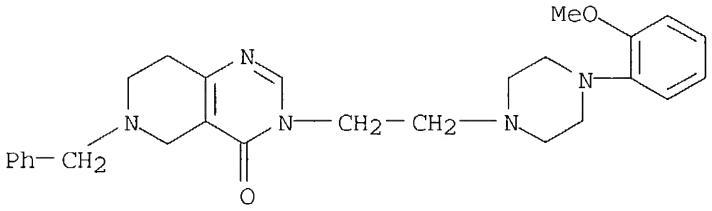
AB Title compds. [I; R = Z1Z2R5; R3R4 = CH2CH2NR1CH2 or CH2NR1CH2CH2; R1 = H, (phenyl)alkyl, alkanoyl, etc.; R5 = (hetero)aryl; Z1 =

(heteroatom-interrupted) alkylene or alkenylene; Z2 = 1,n-azacycloalkylene] were prepd. as serotonin reuptake inhibitors (no data). Thus, Me N-benzyl-4-piperidone-3-carboxylate was cyclocondensed with H2NC(:NH)H and the product condensed with ClCH2CH2z2C6H4(OMe)-2 (Z2 = 1,4-piperazinediyl)(prepn. given) to give I [R = CH2CH2Z2C6H4(OMe)-2, R3R4 = CH2N(CH2Ph)CH2CH2, Z2 = 1,4-piperazinediyl].

IT **223609-00-5P 223609-02-7P 223609-04-9P**
223609-05-0P 223609-06-1P 223609-07-2P
223609-08-3P 223609-14-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyridopyrimidinones as serotonin reuptake inhibitors)

RN 223609-00-5 CAPLUS

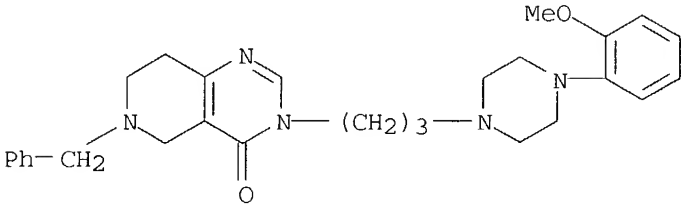
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 5,6,7,8-tetrahydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

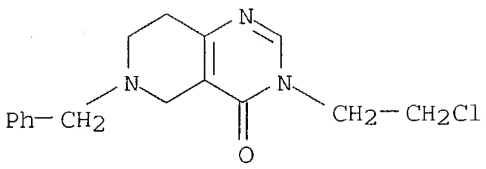
RN 223609-02-7 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 5,6,7,8-tetrahydro-3-[3-[4-(2-methoxyphenyl)-1-piperazinyl]propyl]-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

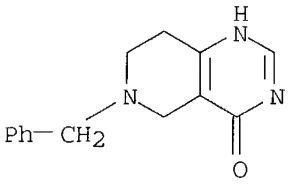


RN 223609-04-9 CAPLUS

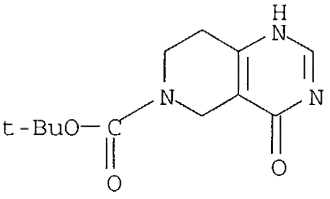
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 3,5,7,8-tetrahydro-3-[2-[4-(1-naphthalenyl)-1-piperazinyl]ethyl]-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



IT **109229-22-3P 223609-09-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of pyridopyrimidinones as serotonin reuptake inhibitors)
RN 109229-22-3 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 223609-09-4 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 13 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:27845 CAPLUS
DOCUMENT NUMBER: 130:95849
TITLE: Dipeptide derivatives as growth hormone secretagogues
INVENTOR(S): Carpino, Philip Albert; Griffith, David Andrew; Lefker, Bruce Allen
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: PCT Int. Appl., 246 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9858947	A1	19981230	WO 1998-IB873	19980605

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,
US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9874454	A1	19990104	AU 1998-74454	19980605
EP 1001970	A1	20000524	EP 1998-921680	19980605
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2000516639	T2	20001212	JP 1999-504026	19980605
US 6251902	B1	20010626	US 1999-380887	19990908
US 2001041703	A1	20011115	US 2001-822738	20010330
US 6525047	B2	20030225		
US 2002002165	A1	20020103	US 2001-822109	20010330
US 6429313	B2	20020806		
US 2002042415	A1	20020411	US 2001-822095	20010330
US 6432945	B2	20020813		
US 2002065284	A1	20020530	US 2001-823051	20010330
US 6433171	B2	20020813		
US 2003216399	A1	20031120	US 2003-371315	20030221
US 2004006063	A1	20040108	US 2003-371330	20030221
US 2004009984	A1	20040115	US 2003-371953	20030221

PRIORITY APPLN. INFO.:	US 1997-50764P	P	19970625
	WO 1998-IB873	W	19980605
	US 1999-380887	A3	19990908
	US 2001-822738	A3	20010330

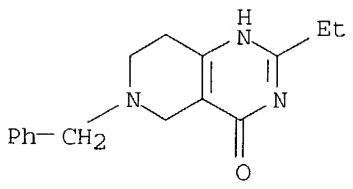
OTHER SOURCE(S): MARPAT 130:95849

AB Dipeptide derivs. HET-COCR3R4NX4CO-R6-NR7R8 [HET is a heterocyclic moiety; R3 = certain (un)substituted ring systems (A1), alkyl, A1-alkyl, etc.; R4 = H, alkyl, cycloalkyl or CR3R4 is a ring system; X4 is H, alkyl, or X4 and R4 form a ring; R6 is a bond or Z1(CH2)aCX5X5a(CH2)b, where a and b are 0-3, X5 and X5a are H, CF3, A1, (un)substituted alkyl or CX5X5a is a ring or the carbon atom bearing X5 and X5a forms one or two alkylene bridges with the nitrogen atom bearing R7 and R8, Z1 = bond, O, NH or imino group; R7, R8 = H, (un)substituted alkyl or R7R8N forms a ring] were prepd. as growth hormone secretagogues. Thus, 2-amino-N-[2-(8a(S)-benzyl-3-oxotetrahydrooxazolo[3,4-a]pyrazin-7-yl)-1(R)-(3,5-dichlorobenzyloxymethyl)-2-oxoethyl]-2-methylpropionamide hydrochloride was prepd. from 1,2,4-piperazinetricarboxylic acid 1-benzyl 4-tert-Bu 2-Me ester, N-tert-butoxycarbonyl-.alpha.-methylalanine, N-tert-butoxy-D-serine, and 1,3-dichloro-5-chloromethylbenzene.

IT **1033-32-5P 218953-13-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of dipeptide derivs. as growth hormone secretagogues)

RN 1033-32-5 CAPLUS

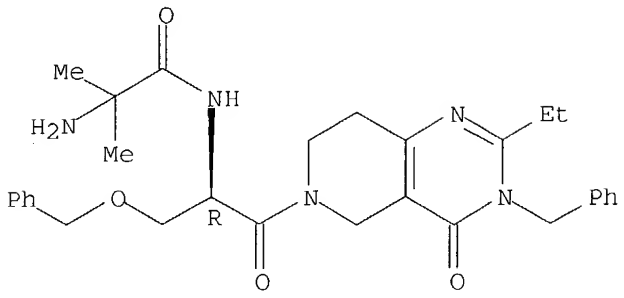
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-ethyl-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 218953-13-0 CAPLUS

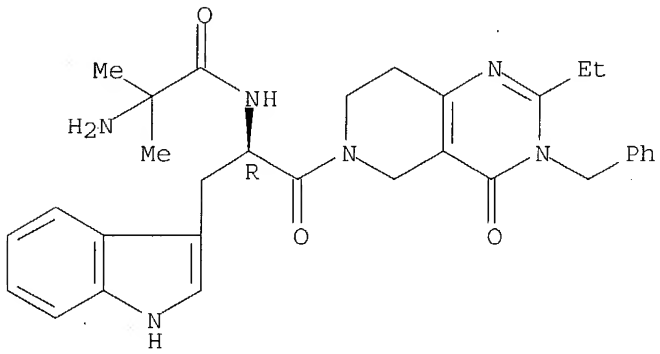
CN Carbamic acid, [2-[[(1R)-2-[2-ethyl-1,5,7,8-tetrahydro-4-oxopyrido[4,3-d]pyrimidin-6(4H)-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]amino]-1,1-dimethyl-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



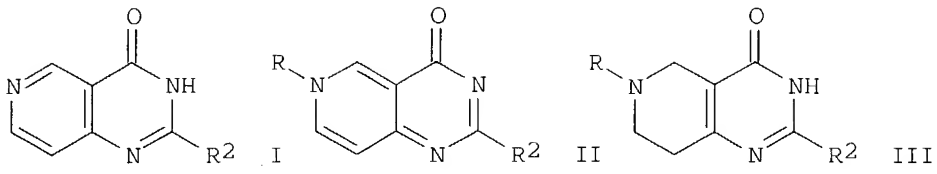
RN 218951-83-8 CAPLUS
CN Propanamide, 2-amino-N-[(1R)-2-[2-ethyl-3,4,7,8-tetrahydro-4-oxo-3-(phenylmethyl)pyrido[4,3-d]pyrimidin-6(5H)-yl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:792127 CAPLUS
DOCUMENT NUMBER: 130:81147
TITLE: Electron impact mass spectrometric studies of 2-methyl, 2-phenyl, 2-(1-piperidyl), and 2-(2/3/4-pyridyl) piperidino- and pyrido[4,3-d]pyrimidin-4-ones
AUTHOR(S): Oksman, Pentti; Pihlaja, Kalevi; Fulop, Ferenc; Huber, Imre; Bernath, Gabor; Karelson, Mati; Perkson, Antti
CORPORATE SOURCE: Department of Chemistry, University of Turku, Turku, FIN-20014, Finland
SOURCE: Rapid Communications in Mass Spectrometry (1998), 12(23), 1845-1858
CODEN: RCMSEF; ISSN: 0951-4198
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



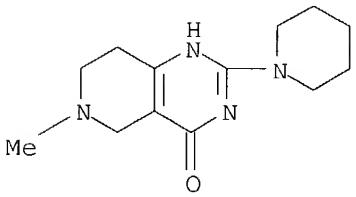
I II III

AB The title compds. (I, II, III; R = H, Me, Bn; R2 = Me, Ph, piperidyl, pyridyl) were investigated to characterize their structure and fragmentation mechanisms by EI electron impact mass spectrometry (EI-MS) and collisionally activated decompn. The results obtained on magnetic sector instruments show that the compds. fragment similarly whether the substituent at C-2 is Ph or 3/4-pyridyl. If, however, it is Me, 2-pyridyl or 1-piperidyl, the balance of fragmentations is different. All the studied compds. are stable and give an intense mol. ion peak. A great difference exists between the fragmentation patterns of the piperidino compds. and those of the more aromatized pyrido compds. The loss of hydrogen aromatizes the piperidino derivs. to some extent, esp. the 2-(2-pyridyl)-substituted compds., forcing them towards a more planar structure. In 2-(2-pyridyl) derivs. an intramol. hydrogen bond between the 3N-H and the 2-pyridyl nitrogen atoms strengthens the effect. Deuterated analogs were used to clarify hydrogen rearrangements and to confirm ion structures. Semiempirical AM1 calcns. were carried out on 70 tautomeric model structures. The results are not in contrast to the MS results and they support, e.g., the proposed intramol. hydrogen bonding between the 3N-H and the 2-(2-pyridyl) nitrogen.

IT **1026-13-7 1047-48-9 1047-49-0**
1448-40-4 139452-52-1 139452-53-2
218955-10-3 218955-11-4 218955-12-5
218955-18-1 218955-19-2
RL: PRP (Properties)
(AM1-calcd. .DELTA.Hf0, IP, .mu.; electron impact mass spectrometric studies of 2-Me, 2-Ph, 2-(1-piperidyl), and 2-(2/3/4-pyridyl) piperidino- and pyrido[4,3-d]pyrimidin-4-ones)

RN 1026-13-7 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-6-methyl-2-(1-piperidinyl)- (9CI) (CA INDEX NAME)



RN 1047-48-9 CAPLUS

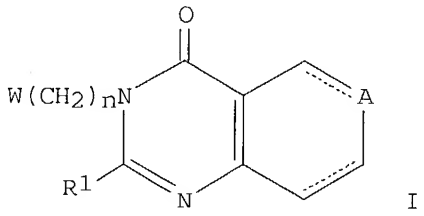
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-phenyl-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

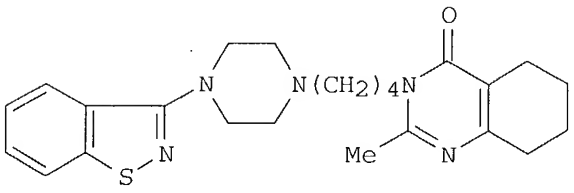
L7 ANSWER 15 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:294880 CAPLUS
DOCUMENT NUMBER: 124:343322
TITLE: Preparation of quinazolinone derivatives as antipsychotics with weak extrapyramidal effects
INVENTOR(S): Fukuda, Yoshimasa; Nakatani, Juko; Hasegawa, Toshibumi; Myashiro, Mio; Yamashita, Noryuki
PATENT ASSIGNEE(S): Meiji Seika Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08027149	A2	19960130	JP 1994-157624	19940708

PRIORITY APPLN. INFO.: JP 1994-157624 19940708
OTHER SOURCE(S): MARPAT 124:343322
GI



I



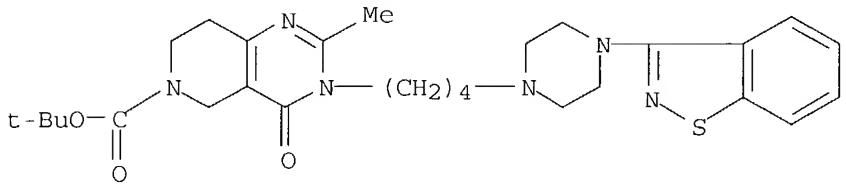
II

AB The title compds. I [n = 1 - 5; R1 = H, methyl; dotted line indicates single or double bond; A = CH2, NR3 (R3 = H, etc.), CH, N; W = heterocyclic moiety (structures given)] are prepd. In a test for antipsychotic effect using mice, the title compd. II (prepn. given) showed ED50 of 0.38 mg/Kg i.p., vs. ED50 of 0.16 mg/Kg i.p for haloperidol, and ED50 of 1.05 mg/Kg i.p for chlorpromazine. In a test for cataleptogenic effects using mice, II showed ED50 of 38.4 mg/Kg i.p., vs. ED50 of 1.3 mg/Kg i.p for haloperidol, and ED50 of 6.2 mg/Kg i.p for chlorpromazine.

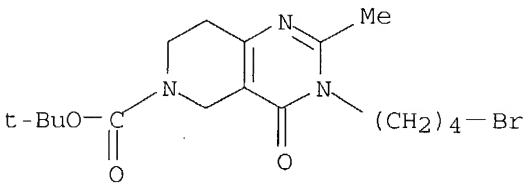
IT **176493-86-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of quinazolinone derivs. as antipsychotics with weak extrapyramidal effects)

RN 176493-86-0 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 3-[4-[4-(1,2-benzisothiazol-

3-yl)-1-piperazinyl]butyl]-3,5,7,8-tetrahydro-2-methyl-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



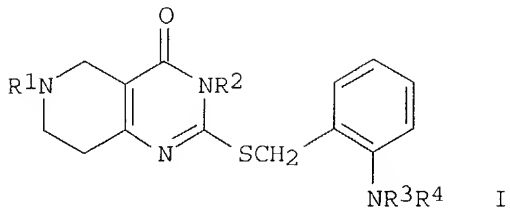
IT **176493-89-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of quinazolinone derivs. as antipsychotics with weak extrapyramidal effects)
RN 176493-89-3 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 3-(4-bromobutyl)-3,5,7,8-tetrahydro-2-methyl-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 16 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:241543 CAPLUS
DOCUMENT NUMBER: 124:289272
TITLE: Preparation and formulation of terahydropyridopyrimidinone derivatives as ulcer inhibitors
INVENTOR(S): Kawase, Akito; Shimamura, Hiroshi; Terajima, Koji; Ishizuka, Yasuhiro; Kamisaki, Toshiaki
PATENT ASSIGNEE(S): Morishita Pharma, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07330769	A2	19951219	JP 1994-142474	19940531

PRIORITY APPLN. INFO.: JP 1994-142474 19940531
OTHER SOURCE(S): MARPAT 124:289272
GI



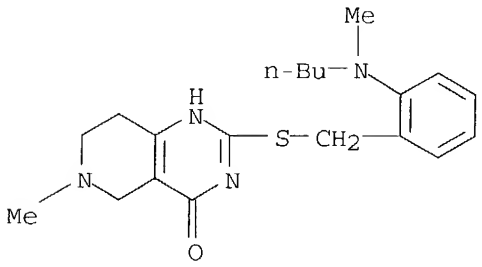
I

AB The title compds. I [R1 = H, alkyl, etc.; R2 = H, alkyl; R3, R4 = alkyl] are claimed. I [R1 = R3 = R4 = methyl; R2 = H] (NMR data given) at 15 mg/Kg orally gave 98.8% inhibition of indomethacin-induced stomach ulcer in rats, vs. 58.9% inhibition by cimetidine at 100 mg/kg.

IT **175595-62-7P 175595-63-8P 175595-64-9P**
175595-65-0P 175595-66-1P 175595-67-2P
175595-68-3P 175595-69-4P 175595-74-1P
175595-75-2P 175595-76-3P 175595-77-4P
175595-78-5P 175595-79-6P 175595-80-9P
175595-81-0P 175595-82-1P 175595-83-2P
175595-84-3P 175595-85-4P 175595-86-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of terahydropyridopyrimidinone derivs. as ulcer inhibitors)

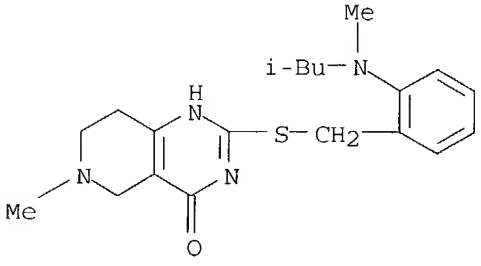
RN 175595-62-7 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-[[[2-(butylmethylamino)phenyl]methyl]thio]-5,6,7,8-tetrahydro-6-methyl- (9CI) (CA INDEX NAME)



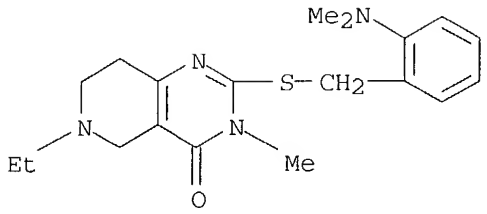
RN 175595-63-8 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-6-methyl-2-[[[2-[methyl(2-methylpropyl)amino]phenyl]methyl]thio]- (9CI) (CA INDEX NAME)

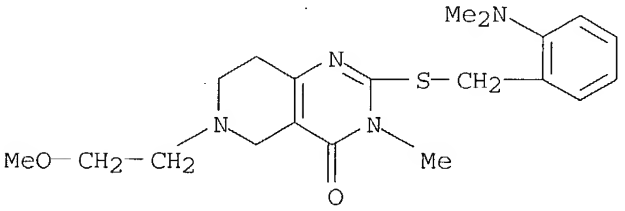


RN 175595-64-9 CAPLUS

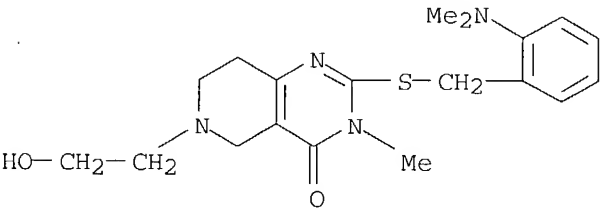
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-[[[2-(dimethylamino)phenyl]methyl]thio]-5,6,7,8-tetrahydro-6-methyl- (9CI) (CA INDEX NAME)



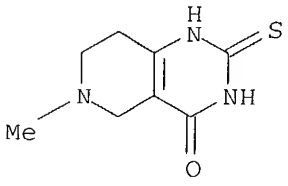
RN 175595-85-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 2-[[[2-(dimethylamino)phenyl]methyl]thio]-5,6,7,8-tetrahydro-6-(2-methoxyethyl)-3-methyl- (9CI) (CA INDEX NAME)



RN 175595-86-5 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 2-[[[2-(dimethylamino)phenyl]methyl]thio]-5,6,7,8-tetrahydro-6-(2-hydroxyethyl)-3-methyl- (9CI) (CA INDEX NAME)



IT **154115-14-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of terahydropyridopyrimidinone derivs. as ulcer inhibitors)
RN 154115-14-7 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2,3,5,6,7,8-hexahydro-6-methyl-2-thioxo- (9CI) (CA INDEX NAME)



L7 ANSWER 17 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:389481 CAPLUS
DOCUMENT NUMBER: 122:239661

10/634,181

TITLE: Synthesis and antifolate activity of 2,4-diamino-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine analogs of trimetrexate and piritrexim

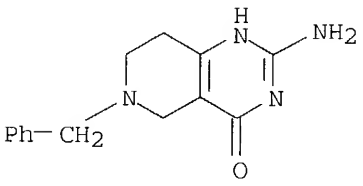
AUTHOR(S): Rosowsky, Andre; Mota, Clara E.; Queener, Sherry F.
CORPORATE SOURCE: Dana-Farber Cancer Inst. Dep. Biol. Chem. Mol. Pharmacol., Harvard Med. Sch., Boston, MA, 02115, USA

SOURCE: Journal of Heterocyclic Chemistry (1995), 32(1), 335-40
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Some (dimethoxyphenyl)- and (trimethoxyphenyl)-substituted 2,4-diamino-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidines were prepd. An improved method of prepn. of 2,4-diamino-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine from 2-amino-6-benzyl-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4(3H)-one was developed. In assays of the ability of the products to inhibit dihydrofolate reductase from Pneumocystis carinii, and Toxoplasma gondii the most active compd. was 2,4-diamino-6-(2'-bromo-3',4',5'-trimethoxybenzyl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine. 2',5'-Dimethoxybenzyl analogs were less active than the corresponding 3',4'-5'-trimethoxybenzyl analogs, and compds. with a CH2CH2 or CH2CH2CH2 bridge were less active than those with a CH2 bridge. 2,4-Diamino-6-(2'-bromo-3',4',5'-trimethoxybenzyl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine showed greater selectivity than trimetrexate or piritrexim for the P. carinii and T. gondii enzyme, but was less selective than trimethoprim or pyrimethamine. However its molar potency against both enzymes was greater than that of trimethoprim, the antifolate most commonly used, in combination with sulfamethoxazole, for initial treatment of opportunistic P. carinii and T. gondii infections in patients with AIDS and other disorders of the immune system.

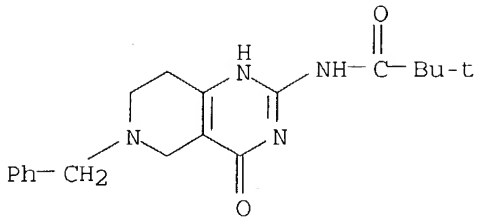
IT **1029-52-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and antifolate activity of pyrido[4,3-d]pyrimidine analogs of trimetrexate and piritrexim)

RN 1029-52-3 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-amino-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

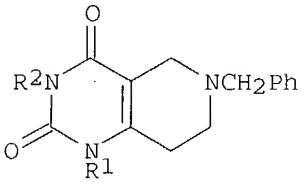


IT **162335-18-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and antifolate activity of pyrido[4,3-d]pyrimidine analogs of trimetrexate and piritrexim)

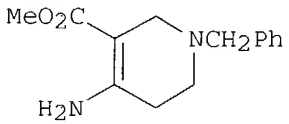
RN 162335-18-4 CAPLUS
CN Propanamide, N-[1,4,5,6,7,8-hexahydro-4-oxo-6-(phenylmethyl)pyrido[4,3-d]pyrimidin-2-yl]-2,2-dimethyl- (9CI) (CA INDEX NAME)



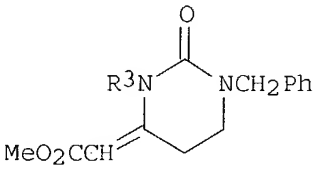
L7 ANSWER 18 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:300856 CAPLUS
DOCUMENT NUMBER: 122:133110
TITLE: Conversion of 1-benzyl-4-aminotetrahydropyridine-3-carboxylic acid methyl ester to antithrombotic pyrido[4,3-d]pyrimidine-2,4-diones and to (2-oxotetrahydropyrimidin-4-ylidene)acetic acid methyl esters
AUTHOR(S): Furrer, H.; Fehlbaber, H. W.; Wagner, R.
CORPORATE SOURCE: Med. Chem., Hoechst AG Werk Kalle-Albert, Wiesbaden, D-65174, Germany
SOURCE: Journal of Heterocyclic Chemistry (1994), 31(6), 1569-75
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 122:133110
GI



I



II



III

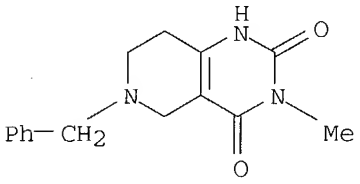
AB Pyridopyrimidinedione I (R1 = H, R2 = Me) (2), a representative of new antithrombotic compds. with favorable cerebral and peripheral effects, has been synthesized from enamine II in good yield by two methods. The thermal fusion of II with ureas gave 2 and I (R1 = H, Me, R2 = H) and unexpectedly the esters (Z)-III (R3 = H) (6) and (E)-III (R3 = Me) (7). The structure of 6 was deduced from its spectroscopic properties and was proven by ozonolysis to cleavage products 1-benzyldihydropyrimidine-2,4-dione and OCHCO2Me and by oxidative hydrolysis to 1-benzyl-4-methyl-1,2-dihydropyrimidin-2-one. The (Z)-configured 6 was converted to (E)-configurated 7 by methylation. The products I (R1 = Me, R2 = H, Me, R1 = R2 = H) were synthesized by independent methods. Compd. 2 underwent

hydrogenolysis and subsequent N-methallylation.

IT **159660-87-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of antithrombotic pyridopyrimidinediones and (oxotetrahydropyrimidinylidene)acetic acid esters)

RN 159660-87-4 CAPLUS

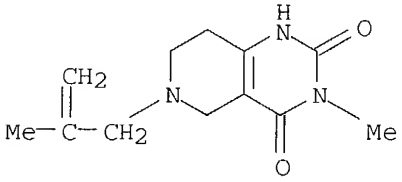
CN Pyrido[4,3-d]pyrimidine-2,4(1H,3H)-dione, 5,6,7,8-tetrahydro-3-methyl-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT **159660-63-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of antithrombotic pyridopyrimidinediones and (oxotetrahydropyrimidinylidene)acetic acid esters)

RN 159660-63-6 CAPLUS

CN Pyrido[4,3-d]pyrimidine-2,4(1H,3H)-dione, 5,6,7,8-tetrahydro-3-methyl-6-(2-methyl-2-propenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

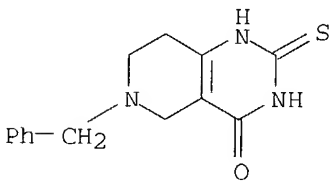


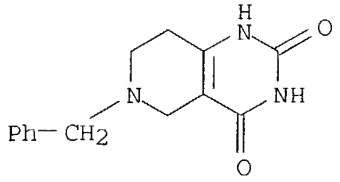
● HCl

IT **67140-12-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of antithrombotic pyridopyrimidinediones and (oxotetrahydropyrimidinylidene)acetic acid esters)

RN 67140-12-9 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2,3,5,6,7,8-hexahydro-6-(phenylmethyl)-2-thioxo- (9CI) (CA INDEX NAME)



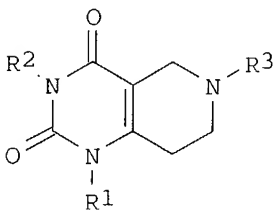


● HCl

L7 ANSWER 19 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:248596 CAPLUS
DOCUMENT NUMBER: 122:23846
TITLE: Pyridopyrimidinediones, their preparation and use for treatment of circulatory and neurodegenerative disorders
INVENTOR(S): Furrer, Harald; Seiffge, Dirk; Okyayuz-Baklouti, Ismahan; Grome, John Joseph
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 621037	A1	19941026	EP 1994-105958	19940418
EP 621037	B1	19990707		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 181832	E	19990715	AT 1994-105958	19940418
ES 2134284	T3	19991001	ES 1994-105958	19940418
US 5556854	A	19960917	US 1994-230811	19940421
JP 06321944	A2	19941122	JP 1994-106305	19940422
JP 3483160	B2	20040106		

PRIORITY APPLN. INFO.: DE 1993-4313317 A 19930423
OTHER SOURCE(S): MARPAT 122:23846
GI

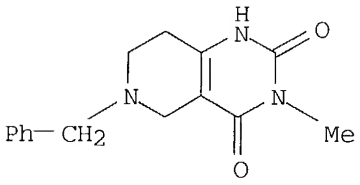


I

AB Pyridopyrimidinediones [I; R1 = R2, (substituted) alkenyl; R2 = H, alkyl, (substituted) benzyl; R3 = R1, cyclohexylmethyl, heterocyclylmethyl, carboxyalkyl, etc.] are prepd. for use in treatment of circulatory and neurodegenerative disorders. Thus, I-HCl (R1 = R3 = H, R2 = Me) showed 33% inhibition of laser-induced thrombosis in rats at 10 mg orally.

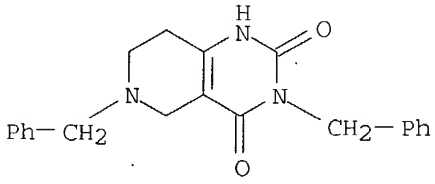
IT **159660-40-9P 159660-42-1P 159660-43-2P**
159660-44-3P 159660-45-4P 159660-46-5P
159660-47-6P 159660-48-7P 159660-50-1P
159660-51-2P 159660-53-4P 159660-55-6P
159660-56-7P 159660-57-8P 159660-58-9P
159660-59-0P 159660-60-3P 159660-61-4P
159660-62-5P 159660-63-6P 159660-64-7P
159660-65-8P 159660-66-9P 159660-67-0P
159660-68-1P 159660-69-2P 159660-70-5P
159660-71-6P 159660-72-7P 159660-73-8P
159660-74-9P 159660-75-0P 159660-76-1P
159660-78-3P 159660-80-7P 159660-81-8P
159660-82-9P 159660-83-0P 159660-84-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyridopyrimidinedione prepn. and use for treatment of circulatory and neurodegenerative disorders)

RN 159660-40-9 CAPLUS
CN Pyrido[4,3-d]pyrimidine-2,4(1H,3H)-dione, 5,6,7,8-tetrahydro-3-methyl-6-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



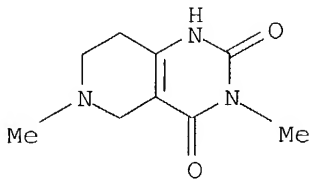
● HCl

RN 159660-42-1 CAPLUS
CN Pyrido[4,3-d]pyrimidine-2,4(1H,3H)-dione, 5,6,7,8-tetrahydro-3,6-bis(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



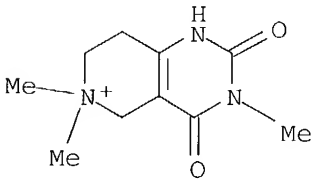
● HCl

RN 159660-43-2 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(2H)-acetic acid, 1,3,4,5,7,8-hexahydro-3-methyl-2,4-dioxo-.alpha.-phenyl-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 159660-98-7 CAPLUS
CN Pyrido[4,3-d]pyrimidinium, 1,2,3,4,5,6,7,8-octahydro-3,6,6-trimethyl-2,4-dioxo-, iodide (9CI) (CA INDEX NAME)



● I⁻

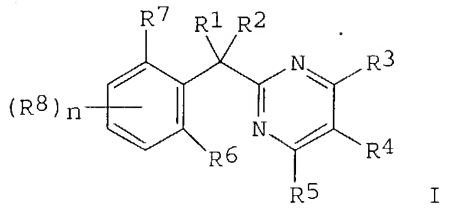
L7 ANSWER 20 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:630784 CAPLUS
DOCUMENT NUMBER: 121:230784
TITLE: Preparation of 2-benzoylpyrimidine derivatives as herbicides and agrochemical fungicides
INVENTOR(S): Yamada, Hirokazu; Tanaka, Katsunori; Adachi, Hiroyuki; Yamada, Shigeo; Shimoda, Susumu
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
SOURCE: PCT Int. Appl., 200 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9408975	A1	19940428	WO 1993-JP1478	19931014
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9351611	A1	19940509	AU 1993-51611	19931014
EP 665224	A1	19950802	EP 1993-922632	19931014
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9307264	A	19990511	BR 1993-7264	19931014
JP 07048359	A2	19950221	JP 1993-282006	19931015
CN 1098717	A	19950215	CN 1994-100163	19940110

PRIORITY APPLN. INFO.: JP 1992-304622 19921016
JP 1993-28313 19930528
JP 1993-154303 19930601
WO 1993-JP1478 19931014

OTHER SOURCE(S): MARPAT 121:230784

GI



I

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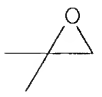

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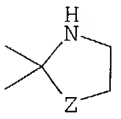

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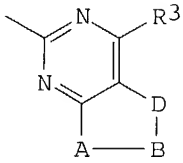

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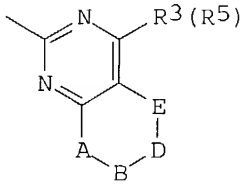
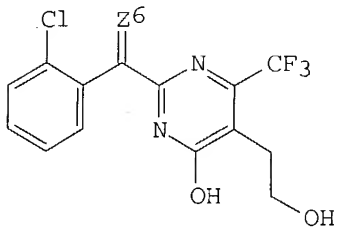
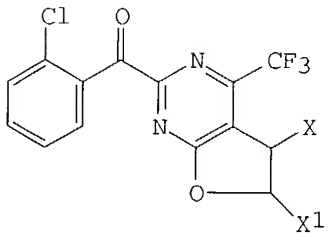




II



III

AB The title compds. [I; R1, R2 = H, alkyl, alkenyl, alkynyl, Ph, cyano, CO2H, alkoxycarbonyl, halo, (un)substituted OH or SH, NH2, etc.; or alternatively R1R2 = oxo, thioxo, cyclic ketal or thioketal, (un)substituted :CH2, :NH, :NNH2, or :NOH, or a spiro ring selected from among Q - Q2 (wherein Z = O, S, NH); R3, R5 = H, halo, alkyl, alkenyl, alkynyl, Ph, cycloalkyl, (un)substituted NH2, NHNH2, OH, CO2H, or CONH2, cyano, etc.; R4 = H, halo, NH2, cyano, alkyl, alkenyl, alkynyl, Ph, cycloalkyl, (un)substituted CO2H, CONH2, or OH, etc.; provided that R3 and R5 are different from each other when R4 = H and that R4 may be combined with R3 and R5 and the pyrimidine ring to represent a condensed ring Q3 or Q4 [wherein at least one of A, B, D, and E = (un)substituted CH2 or NH, O, or S(O)q (wherein q = 0, 1,2), and the rest = (un)substituted CH2]; R6, R7 = H, halo, NO2, cyano, alkyl, alkenyl, alkynyl, Ph, cycloalkyl, (un)substituted CO2H, CONH2, or OH, etc.; provided that R6 = R7 .noteq. H; R8 = any group listed in R6 and R7 except H; n = 0,1,2,3; provided that when R1 = R2 = H, R4 may be combined with R3 and R5 and the pyrimidine ring to represent a condensed ring Q3 or Q4] are prepd. Thus, 5 g 2-(2-chlorophenyl)acetamidine hydrochloride and 5.3 g .alpha.-trifluoroacetyl-.gamma.-butyrolactone were added to a soln. of Na in EtOH and refluxed for 18 h to give 5.2 g benzylpyrimidine deriv. (II; Z6 = H2) which was refluxed with SeO2 in aq. dioxane to give benzoylpyrimidine deriv. II (Z6 = O). The latter compd. was refluxed with POCl3 in toluene for 2 h to give 5,6-dihydrofuro[2,3-d]pyrimidine (III; X = X1 = H) which was refluxed with NiO2 in toluene for 5 h to give furo[2,3-d]pyrimidine

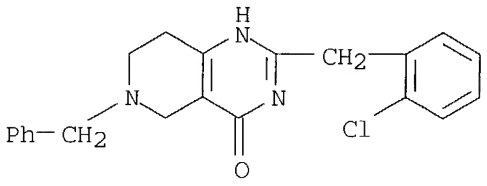
III (XX1 = bond). This compd. at 200/are preemergence controlled 100% Digitaria ciliaris, Setaria Faberii, and Amaranthus Blitum and at 200 ppm completely controlled Plasmopara viticola in grape vine leaves. A total of .apprx.400 I were prepd.

IT **158351-46-3P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as herbicide and agrochem. fungicide)

RN 158351-46-3 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-[(2-chlorophenyl)methyl]-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 21 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:426916 CAPLUS

DOCUMENT NUMBER: 121:26916

TITLE: Angiotensin II receptor-blocking 2,3,6-substituted 5,6,7,8-tetrahydropyrido(4,3)pyrimidin-4(3H)ones

INVENTOR(S): Newman, Howard

PATENT ASSIGNEE(S): American Cyanamid Co., USA

SOURCE: U.S., 8 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

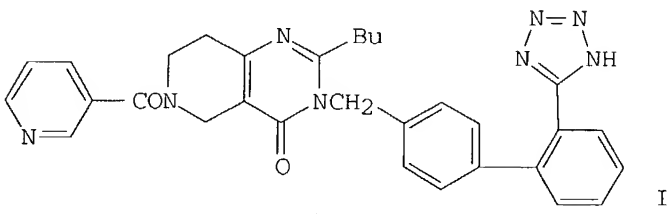
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5296480	A	19940322	US 1993-52938	19930423

PRIORITY APPLN. INFO.: US 1993-52938 19930423

OTHER SOURCE(S): MARPAT 121:26916

GI



I

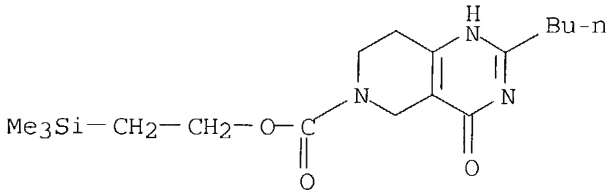
AB The title compds. are angiotensin-II antagonists and are therefore useful in alleviating angiotensin-induced hypertension and for treating congestive heart failure. For example, I was prepd. and showed in vitro IC50 value of 5.1.times.10 -8 M for binding angiotensin II receptor.

IT **155827-74-0P 155827-76-2P 155827-78-4P**

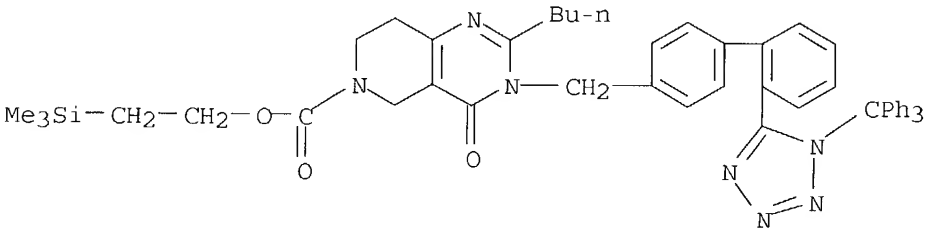
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(prepn. and reaction of, in prepn. of angiotensin II receptor blocking agent)

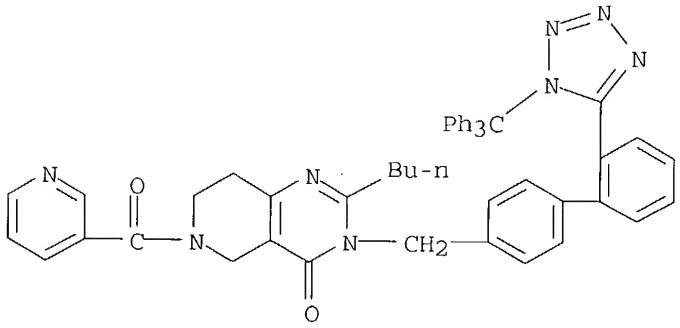
RN 155827-74-0 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 2-butyl-1,5,7,8-tetrahydro-4-oxo-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)



RN 155827-76-2 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 2-butyl-3,5,7,8-tetrahydro-4-oxo-3-[[2'-[1-(triphenylmethyl)-1H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

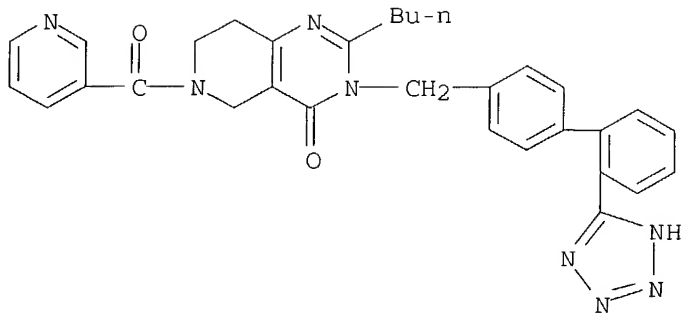


RN 155827-78-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 2-butyl-5,6,7,8-tetrahydro-6-(3-pyridinylcarbonyl)-3-[[2'-[1-(triphenylmethyl)-1H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)



IT **155827-79-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as angiotensin II receptor blocking agent)

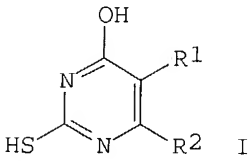
RN 155827-79-5 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 2-butyl-5,6,7,8-tetrahydro-6-(3-pyridinylcarbonyl)-3-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)



L7 ANSWER 22 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:311346 CAPLUS
DOCUMENT NUMBER: 120:311346
TITLE: Treatment of direct-positive silver halide photographic material
INVENTOR(S): Yamamoto, Seiichi; Yoshida, Tetsuo
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05289257	A2	19931105	JP 1992-114174	19920408

PRIORITY APPLN. INFO.: JP 1992-114174 19920408
OTHER SOURCE(S): MARPAT 120:311346
GI

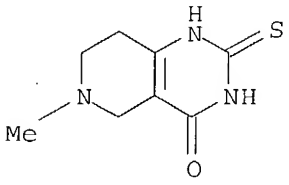


I

AB The material, comprising a substrate coated with .gtoreq.1 of photosensitive Ag halide emulsion layers, is treated by a developer contg. a pyrimidine deriv. I (R1-2 = H, alkyl, aryl, alalkyl, OH, mercapto, CO2H, sulfo, phosphono, NH2, NO2, CN, halo, alkoxycarbonyl, aryloxycarbonyl, carbamoyl, sulfamoyl, alkoxy; R1 and R2 may form a ring).

IT **154115-14-7**
RL: USES (Uses)
(direct-pos. silver halide photog. developed with)

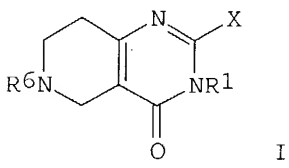
RN 154115-14-7 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2,3,5,6,7,8-hexahydro-6-methyl-2-thioxo-(9CI) (CA INDEX NAME)



L7 ANSWER 23 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:270443 CAPLUS
DOCUMENT NUMBER: 120:270443
TITLE: Preparation of 6-acyl-3-biphenylylmethyl-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4(3H)-ones as angiotensin II receptor antagonists
INVENTOR(S): Newman, Howard
PATENT ASSIGNEE(S): American Cyanamid Co., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5281602	A	19940125	US 1993-52933	19930423

PRIORITY APPLN. INFO.: US 1993-52933 19930423
OTHER SOURCE(S): MARPAT 120:270443
GI



I

AB Title compds. [I; R1 = 2'-(1H-tetrazol-5-yl)-1,1'-biphenyl-4-ylmethyl](II; R6 = CO2CH2Ph, COCMe3, Ac, COCMe2OH, COCH:CH2; X = alkyl) were prepd. Thus, Et 1-(2-hydroxy-2-methyl-1-oxopropyl)-4-oxo-3-piperidinecarboxylate was cyclocondensed with BuC(:NH)NH2 (prepn. each given) to give I (R1 = H, R6 = COCMe2OH, X = Bu) which was condensed with 5-(4'-bromomethyl-1,1'-biphenyl-2-yl)-1-triphenylmethyl-1H-tetrazole to give, after deprotection, II (R6 = COCMe2OH, X = Bu). The latter gave 85% inhibition of angiotensin II-induced pressor response in rats at 15mg/kg i.v.

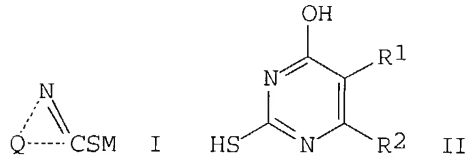
IT **154548-46-6P 154548-47-7P 154548-49-9P**
154548-50-2P 154548-52-4P 154548-53-5P
154548-54-6P 154548-55-7P 154548-56-8P
154548-57-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of angiotensin II antagonist)

RN 154548-46-6 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 2-butyl-3,5,7,8-tetrahydro-4-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 24 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:231865 CAPLUS
DOCUMENT NUMBER: 120:231865
TITLE: Development of silver halide photographic material
INVENTOR(S): Okamoto, Yasuhiro; Hirano, Mitsunori
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05241281	A2	19930921	JP 1992-75697	19920227

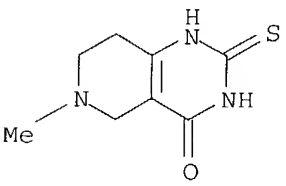
PRIORITY APPLN. INFO.: JP 1992-75697 19920227
OTHER SOURCE(S): MARPAT 120:231865
GI



AB The photog. material comprising .gtoreq.1 Ag halide emulsion layer and .gtoreq.1 hydrophilic colloidal layer contg. .gtoreq.1 of I (Q = atoms to form 5- or 6-membered heterocycle which may be condensed with arom. hydrocarbon ring or arom. heterocycle; M = H, alkali metal, NH4+, leaving group in alk. condition) on one side of support is treated with a developing soln. contg. II (R1-2 = H, alkyl, aryl, aralkyl, OH, SH, COOH, sulfo, phosphono, amino, NO2, CN, halo, alkoxycarbonyl, aryloxycarbonyl, carbamoyl, sulfamoyl, alkoxy, R1 and R2 may form a ring). The method gives clear images without stains.

IT **154115-14-7**
RL: USES (Uses)
(photog. developers contg.)

RN 154115-14-7 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2,3,5,6,7,8-hexahydro-6-methyl-2-thioxo-(9CI) (CA INDEX NAME)



L7 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:625974 CAPLUS
DOCUMENT NUMBER: 119:225974
TITLE: Preparation of substituted pyrimidinones and antiulcer

agents containing them

INVENTOR(S): Kitagawa, Osamu; Ishii, Katsuyuki; Hayashi, Akinobu; Takemasa, Toshihiko; Yamada, Hiroko; Seiki, Masao

PATENT ASSIGNEE(S): Zeria Pharm Co Ltd, Japan

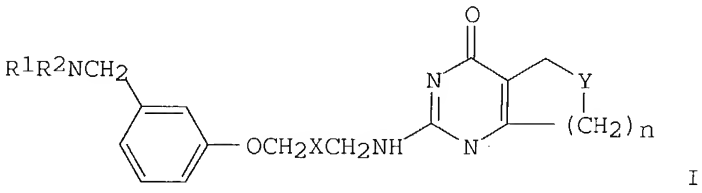
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05163250	A2	19930629	JP 1991-352941	19911217

PRIORITY APPLN. INFO.: JP 1991-352941 19911217
OTHER SOURCE(S): MARPAT 119:225974

GI

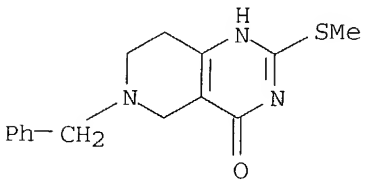


I

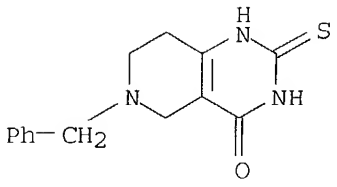
AB The title compds. I [R1, R2 = lower alkyl; NR1R2 may form (un)substituted ring; X = CH2, CH:CH; Y = S, O, SO, SO2, CH2, lower alkyl-substituted C, aralkyl, lower alkyl-substituted N; n = 1-3] and their pharmacol. acceptable salts, which strongly inhibit gastric acid and protect the stomach, are prepd. Refluxing 755 mg 5,6,7,8-tetrahydro-2-methylthio-4(1H)quinazolinone with 1 g 3-[(3-piperidinomethyl)phenoxy]propylamine in MePh for 24 h gave 730 mg I (R1R2N = piperidino, X = Y = CH2, n = 2) (II), which inhibited EtOH-induced ulcer at ED50 13.3 mg/kg in rats, vs. roxatidine. Granules were manufd. from II 20, lactose 315, corn starch 125, cryst. cellulose 25 g, and 200 mL aq. 7.5% hydroxypropyl cellulose soln.

IT **1033-34-7P 67140-12-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of)

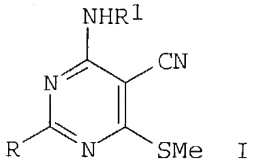
RN 1033-34-7 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-(methylthio)-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



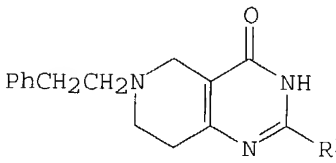
RN 67140-12-9 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2,3,5,6,7,8-hexahydro-6-(phenylmethyl)-2-thioxo- (9CI) (CA INDEX NAME)



L7 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:625911 CAPLUS
DOCUMENT NUMBER: 119:225911
TITLE: Chemotherapeutic agents. Part XXIII. Synthesis of .pi.-deficient pyrimidines and fused pyrimidines as leishmanicides
AUTHOR(S): Ram, Vishnu J.; Haque, Navedul; Nath, Mahendra
CORPORATE SOURCE: Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, 226 001, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1993), 32B(7), 754-9
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



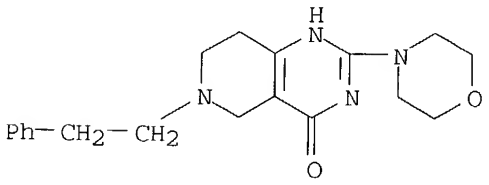
I



II

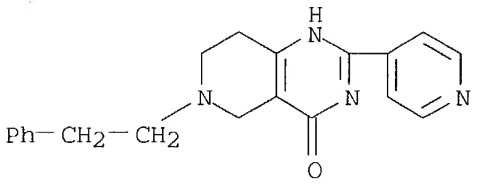
AB Various .pi.-deficient pyrimidines, e.g., I (R = Me, Ph, 4-pyridyl; R1 = H, aryl) and fused pyrimidines, e.g., II (R2 = 4-pyridyl, morpholino, SCH2Ph) have been synthesized and evaluated for their leishmanicidal activity against L. donovani. None of the compds. showed significant activity.

IT **1049-63-4P 150808-11-0P 150808-12-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 1049-63-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-(4-morpholinyl)-6-(2-phenylethyl)- (9CI) (CA INDEX NAME)

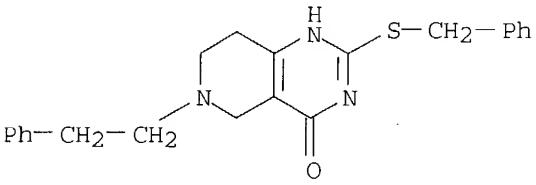


RN 150808-11-0 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-6-(2-phenylethyl)-2-

(4-pyridinyl)- (9CI) (CA INDEX NAME)



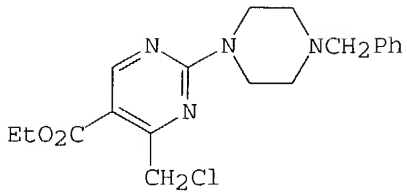
RN 150808-12-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-6-(2-phenylethyl)-2-[(phenylmethyl)thio]- (9CI) (CA INDEX NAME)



L7 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:448598 CAPLUS
DOCUMENT NUMBER: 117:48598
TITLE: Preparation of heterocyclic compounds as psychotropic agents
INVENTOR(S): Imuda, Junichi; Furuya, Yoshiro; Ishitoku, Takeshi; Mizuchi, Akira; Horigome, Kazutoshi; Awaya, Akira
PATENT ASSIGNEE(S): Mitsui Sekiyu Kagaku Kogyo K. K., Japan; Mitsui Seiyaku Kogyo K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04054181	A2	19920221	JP 1990-162676	19900622
JP 3036789	B2	20000424		

PRIORITY APPLN. INFO.: JP 1990-162676 19900622
OTHER SOURCE(S): MARPAT 117:48598
GI



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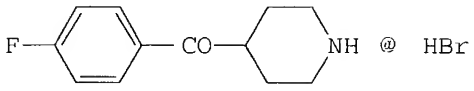
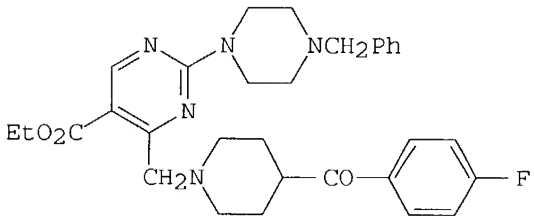


II



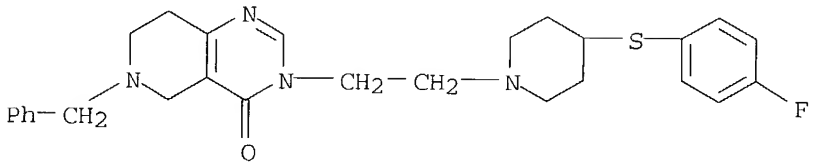
III

AB Heterocyclic compds. are prepd. as serotoninergic and dopaminergic antagonists. Refluxing a mixt. of pyrimidine deriv. I, piperidine salt II, and K2CO2 in MeCOCH2CHMe2 gave 80% III, which showed 39% inhibition of dopamineric activity at 1 mg/mL. Also prepd. and tested were 16 addnl. heterocyclic compds. Tablet, capsule, and injection formulations were given.

IT **142222-04-6P 142222-05-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as psychotropic agent)

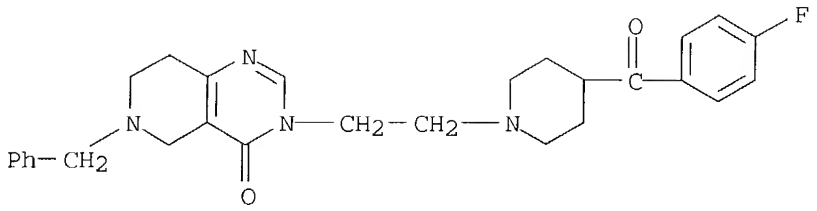
RN 142222-04-6 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 3-[2-[4-[(4-fluorophenyl)thio]-1-piperidinyl]ethyl]-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

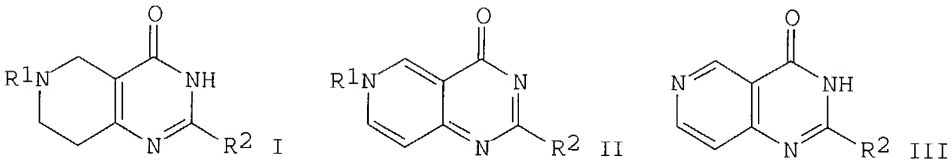


RN 142222-05-7 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 3-[2-[4-(4-fluorobenzoyl)-1-piperidinyl]ethyl]-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



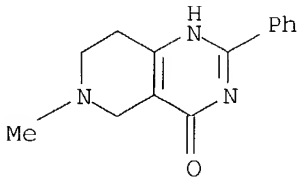
L7 ANSWER 28 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:151704 CAPLUS
DOCUMENT NUMBER: 116:151704
TITLE: Saturated heterocycles. 184. Dehydrogenation of 6-azaquinazoline derivatives. Formation of unexpected quinonediimine intermediates
AUTHOR(S): Huber, Imre; Fulop, Ferenc; Lazar, Janos; Bernath, Gabor; Toth, Gabor
CORPORATE SOURCE: Inst. Pharm. Chem., Albert Szent-Gyorgyi Med. Univ., Szeged, H-6701, Hung.
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1992), (1), 157-61
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 116:151704
GI



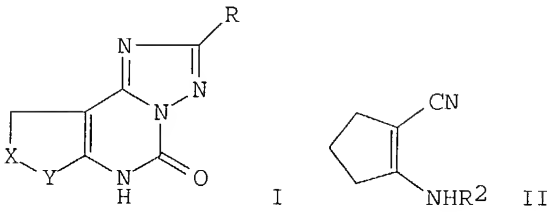
AB 2,6-Disubstituted 5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4(3H)-one (6-azaquinazoline) derivs. I (R1 = PhCH2, R2 = Ph, 4-pyridyl, Me; R1 = Me, R2 = Ph, Me) were synthesized from N-substituted 3-(methoxycarbonyl)-4-piperidones and amidines R2C(:NH)NH2. Compds. I and their debenzylated derivs. underwent dehydrogenation in xylene or in PhNO2 in the presence of a Pd-C catalyst, to give products II (R1 = PhCH2, R2 = Ph, 4-pyridyl; R1 = Me, R2 = Ph) and III (R2 = Ph, 4-pyridyl, Me), resp. It was found that the formation of the two types of products, II or III, from the same mols. depends on the substituents at positions 2 and 6, and on the inert or oxidative character of the solvent used. The quinonediimine forms II can be considered to be intermediates of the transformation I to III.

IT **1047-48-9P 1078-16-6P 1448-40-4P 139452-52-1P 139452-53-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and dehydrogenation of)

RN 1047-48-9 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-phenyl-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:536038 CAPLUS
DOCUMENT NUMBER: 115:136038
TITLE: Anxiolytic properties of certain annelated [1,2,4]triazolo[1,5-c]pyrimidin-5(6H)-ones
AUTHOR(S): Francis, John E.; Bennett, Debra A.; Hyun, James L.; Rovinski, Stephen L.; Amrick, Caryl L.; Loo, Patricia S.; Murphy, Deborah; Neale, Robert F.; Wilson, Douglas E.
CORPORATE SOURCE: Pharm. Div., Ciba-Geigy Corp., Summit, NJ, 07901, USA
SOURCE: Journal of Medicinal Chemistry (1991), 34(9), 2899-906
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

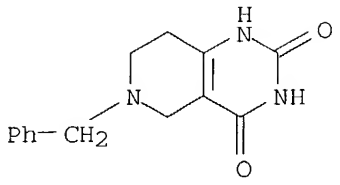


I

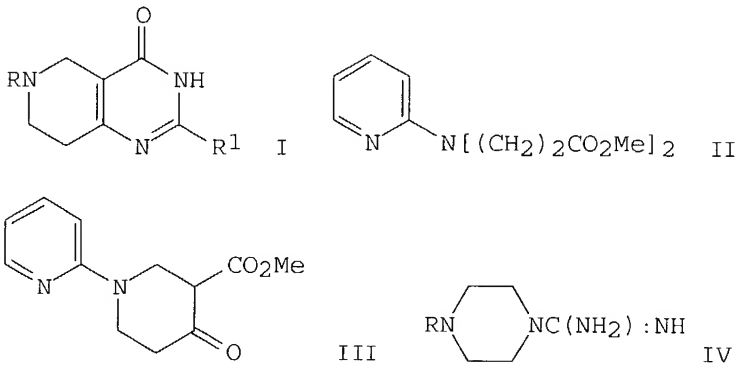
II

AB Title compds. I [R = Ph, 3-FC6H4, 2-ClC6H4, 4-FC6H4, 4-ClC6H4, 2-pyrrolyl, 2-pyridyl, XY = (CH2)n, n = 2-4; XY = N(CH2Ph)CHMe, NHCH2CH2, NPhCH2, NR1CH2CH2, R1 = 2-pyridylmethyl, 3-pyridylmethyl, COCH2Ph, etc.] were prepd. and their anxiolytic properties were examd. Thus, aminocyanocyclopentene II (R2 = H) reacted with (EtO)2CO to give II (R2 = CO2Et) (III). III cyclocondensed with 2-fluorobenzhydrazide to give I (R = 2-FC6H4, XY = CH2CH2). The degree of anxiolytic activity was strongly dependent on the N-substituent in the 9-position.

IT **135481-57-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 135481-57-1 CAPLUS
CN Pyrido[4,3-d]pyrimidine-2,4(1H,3H)-dione, 5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 30 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:408706 CAPLUS
DOCUMENT NUMBER: 115:8706
TITLE: Saturated heterocycles. Part 172. Synthesis of 2,6-disubstituted 5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine derivatives
AUTHOR(S): Lazar, Janos; Bernath, Gabor
CORPORATE SOURCE: Inst. Pharm. Chem., Albert Szent-Gyorgyi Med. Univ., Szeged, H-6701, Hung.
SOURCE: Journal of Heterocyclic Chemistry (1990), 27(7), 1885-92
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:8706
GI

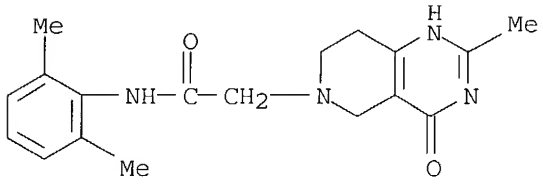


AB The title compds. (I; R = H, alkyl, substituted Ph, aroyl, pyridyl; R1 = Me, Ph, azolyl) were synthesized via the addn. of CH2:CHCO2Me to PhCH2NH2 or to .alpha.-aminopyridine, which gave the corresponding diesters, e.g., (II), followed by Dieckmann condensation of the latter to yield the keto esters, e.g., (III), which were condensed with RC(NH2):NH or guanidines (IV). Subsequent derivatizations gave a no. of products with potential biol. action; some of them showed analgesic and antiinflammatory effects (no data).

IT **1047-48-9P 1047-49-0P 1448-40-4P 134200-75-2P 134200-76-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrogenation of)

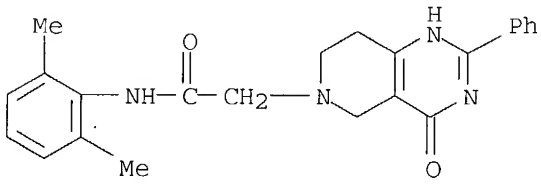
RN 1047-48-9 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-phenyl-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 134201-07-3 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-acetamide, N-(2,6-dimethylphenyl)-1,5,7,8-tetrahydro-2-methyl-4-oxo-, dihydrochloride (9CI) (CA INDEX NAME)



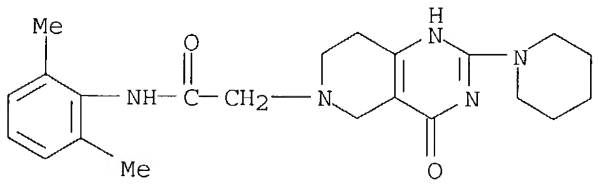
● 2 HCl

RN 134201-08-4 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-acetamide, N-(2,6-dimethylphenyl)-1,5,7,8-tetrahydro-4-oxo-2-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 134201-09-5 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-acetamide, N-(2,6-dimethylphenyl)-1,5,7,8-tetrahydro-4-oxo-2-(1-piperidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)

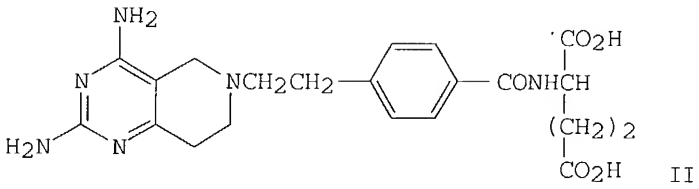


2 HCl

L7 ANSWER 31 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:417135 CAPLUS
DOCUMENT NUMBER: 111:17135
TITLE: 6-Aza-5,8,10-trideaza analogs of tetrahydrofolic acid and tetrahydroaminopterin. 38. Synthesis and

biological studies

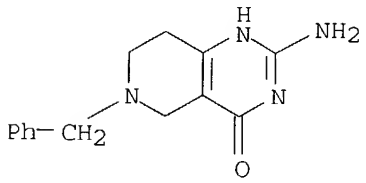
AUTHOR(S): Rosowsky, Andre; Bader, Henry; Moran, Richard G.; Freisheim, James H.
CORPORATE SOURCE: Dana-Farber Cancer Inst., Boston, MA, 02115, USA
SOURCE: Journal of Heterocyclic Chemistry (1989), 26(2), 509-16
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:17135
GI



II

AB 6-Aza-5,8,10-trideaza-5,6,7,8-tetrahydrofolic acid (I) and 6-aza-5,8,10-trideaza-5,6,7,8-tetrahydroaminopterin (II) were synthesized from 6-aza-5,8,10-trideaza-5,6,7,8-tetrahydropteroic acid (III) and 4-amino-6-aza-5,8,10-trideaza-4-deoxy-5,6,7,8-tetrahydropteroic acid (IV), resp., by mixed carboxylic-carbonic anhydride condensation with di-Me L-glutamate followed by ester hydrolysis. The pteroic acid analogs (III) and (IV) were prepd. in several steps from 1-benzyl-3-carbethoxypiperidin-4-one via 2-amino-6-benzyl-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4(3H)one. I did not inhibit the growth of L1210 mouse leukemic cells in culture, and was not an inhibitor of dihydrofolate reductase (DHFR) or thymidylate synthase (TS). It was a very poor substrate for mouse liver folylpolyglutamate synthetase (FPGS). The 2,4-diamino analog II was only a marginal substrate for FPGS, yet showed activity comparable to methotrexate as a DHFR inhibitor and as an inhibitor of tumor cell growth. The cytotoxicity of II is noteworthy because this compd. appears to be the first example of a classical antifolate which forms polyglutamates poorly even though it contains an intact p-aminobenzoyl-L-glutamic acid side-chain. The inability of I and II to form polyglutamates indicates that a basic nitrogen at position 6 is highly unfavorable for binding to FPGS.

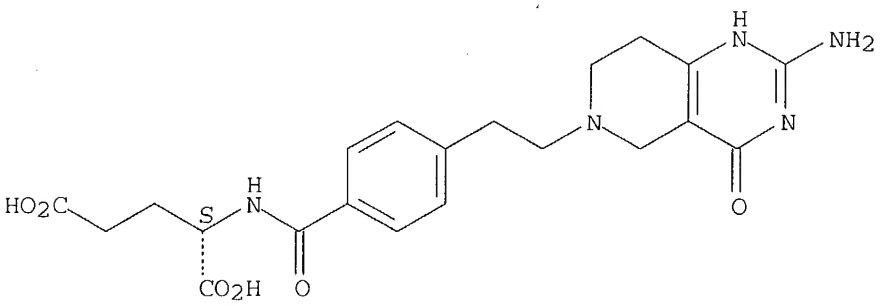
IT **1029-52-3**
RL: BIOL (Biological study)
(debenzylation and reaction with phosphorous oxychloride of)
RN 1029-52-3 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-amino-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT **121187-69-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)

CN L-Glutamic acid, N-[4-[2-(2-amino-1,5,7,8-tetrahydro-4-oxopyrido[4,3-d]pyrimidin-6(4H)-yl)ethyl]benzoyl]- (9CI) (CA INDEX NAME)

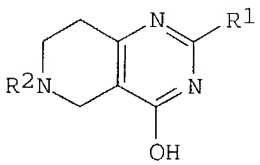
Absolute stereochemistry.



L7 ANSWER 32 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:212843 CAPLUS
Correction of: 1987:439856
DOCUMENT NUMBER: 110:212843
Correction of: 107:39856
TITLE: Preparation of tetrahydropyrido[4,3-d]pyrimidin-4-ols as central nervous system agents
INVENTOR(S): Kretzschmar, Egon; Meisel, Peter
PATENT ASSIGNEE(S): VEB Arzneimittelwerk, Ger. Dem. Rep.
SOURCE: Ger. (East), 12 pp.
CODEN: GEXXA8
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 241257	A1	19861203	DD 1985-281047	19850926

PRIORITY APPLN. INFO.: DD 1985-281047 19850926
OTHER SOURCE(S): CASREACT 110:212843
GI

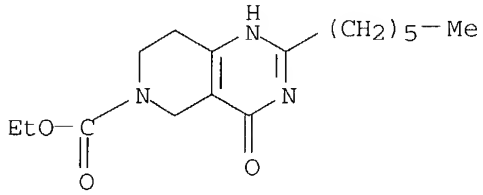


I

AB Title compds I [R1 = C1-5 alkyl, aryl, aralkyl; R2 = 4-FC6H4CO(CH2)3, (4-FC6H4)2CH(CH2)3, PhCH:CHCH2] were prepd. in several steps from I (R2 = PhCH2) as anticonvulsants, sedatives, and tranquilizers (no data). I [R1 = Me2CHCH2 (throughout), R2 = PhCH2] was refluxed in PhMe with ClCO2Et to give 34% I.HCl (R2 = CO2Et). This was refluxed in concd. HCl to give I.2HCl (R2 = H), which was refluxed with (4-FC6H4)2CH(CH2)3Cl in MeCOEt contg. Na2CO3 and catalytic NaI to give 46% I [R1 = Me2CHCH2, R2 = (4-FC6H4)2CH(CH2)3].

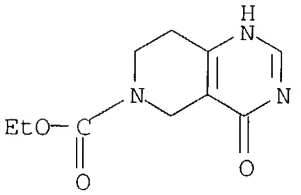
IT **109229-13-2P 109229-14-3P 109229-19-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(prepn. and deethoxycarbonylation of)
RN 109229-13-2 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 2-hexyl-1,5,7,8-tetrahydro-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



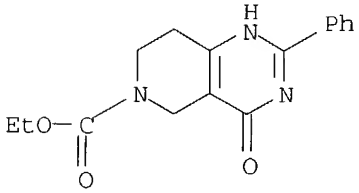
● HCl

RN 109229-14-3 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

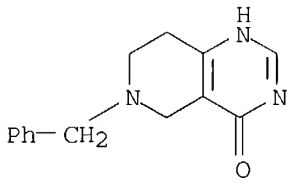


● HCl

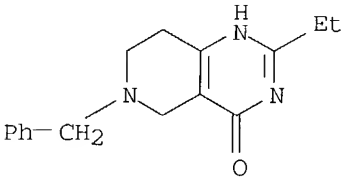
RN 109229-19-8 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-4-oxo-2-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



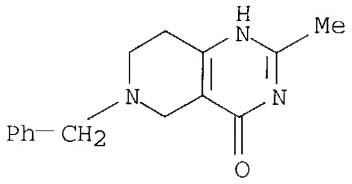
IT **109229-12-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deprotection of)
RN 109229-12-1 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-2-(3-methylbutyl)-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



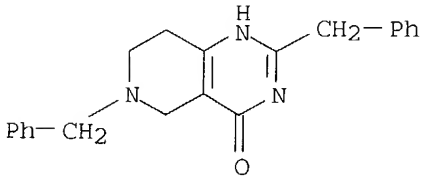
IT **1033-32-5 1448-40-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroformates)
RN 1033-32-5 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-ethyl-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 1448-40-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-methyl-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT **1168-28-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with iso-Pr chloroformate)
RN 1168-28-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2,6-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

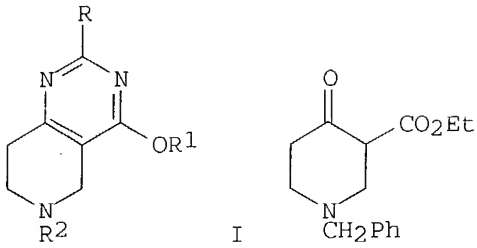


L7 ANSWER 33 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:114783 CAPLUS
DOCUMENT NUMBER: 110:114783

10/634,181

TITLE:	Synthesis of 2,6-disubstituted 4-hydroxy-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidines
AUTHOR(S):	Kretzschmar, E.; Meisel, P.
CORPORATE SOURCE:	Direktionsber. Forsch. Entwickl., VEB Pharm. Komb. GERMED, Dresden, Ger. Dem. Rep.
SOURCE:	Pharmazie (1988), 43(7), 475-6 CODEN: PHARAT; ISSN: 0031-7144
DOCUMENT TYPE:	Journal
LANGUAGE:	German
OTHER SOURCE(S):	CASREACT 110:114783

GI



I

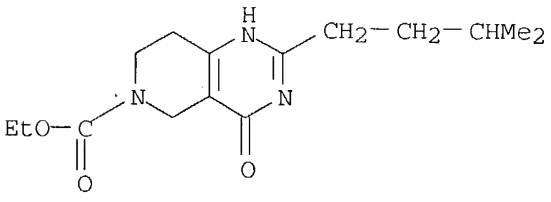
II

AB Pyridopyrimidines I [R = cyclohexyl, CH2CH2CHMe2, Me, CH2Ph, H, Ph, Et; R1 = H, Bu; R2 = CH2Ph, CO2Et, CO2CHMe2, CO2Ph, H, (CH2)3COC6H4F-4, (CH2)3CH(C6H4F-4)2] were prepd. from the piperidinone II and HN:CRNH2.HCl followed by substitution of I (R2 = CH2Ph). I have no pharmacol activity.

IT **109229-12-1P 109229-13-2P 109229-14-3P**
109229-15-4P 109229-16-5P 109229-17-6P
109229-18-7P 109229-19-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and decarboxylation of)

RN 109229-12-1 CAPLUS

CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-2-(3-methylbutyl)-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

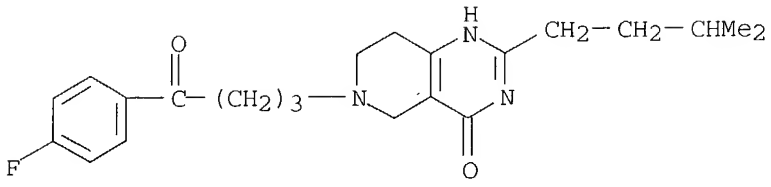


HCl

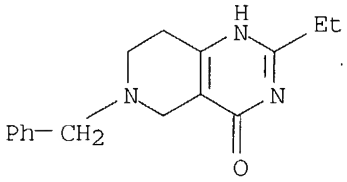
RN 109229-13-2 CAPLUS

CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 2-hexyl-1,5,7,8-tetrahydro-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

5,6,7,8-tetrahydro-2-(3-methylbutyl)- (9CI) (CA INDEX NAME)



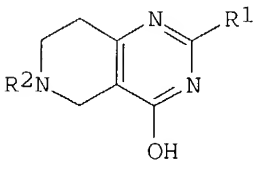
IT **1033-32-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroformate)
RN 1033-32-5 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-ethyl-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 34 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1987:439856 CAPLUS
DOCUMENT NUMBER: 107:39856
TITLE: Preparation of tetrahydropyrido[4,3-d]pyrimidin-4-ols as central nervous system agents
INVENTOR(S): Kretzschmar, Egon; Meisel, Peter
PATENT ASSIGNEE(S): VEB Arzneimittelwerk, Ger. Dem. Rep.
SOURCE: Ger. (East), 12 pp.
CODEN: GEXXA8
DOCUMENT TYPE: Patent
LANGUAGE: German
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 241257 A1		19861203	DD 1985-281047	19850926

GI



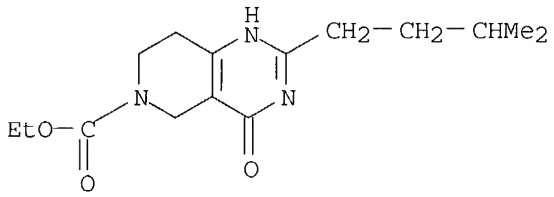
I

AB The title compds. [I; R1 = C1-5 alkyl, aryl, aralkyl; R2 = 4-FC6H4CO(CH2)3, (4-FC6H4)2CH(CH2)3, PhCH:CHCH2] were prepd. in several steps from I (R2 = PhCH2) as anticonvulsants, sedatives, and tranquilizers (no data). I [R1 = Me2CHCH2 (throughout), R2 = PhCH2] was refluxed in

PhMe with ClCO2Et to give 34% I.HCl (R2 = CO2Et). This was refluxed in concd. HCl to give I.2HCl (R2 = H) which was refluxed with (4-FC6H4)2CH(CH2)3Cl in MeCOEt contg. Na2CO3 and catalytic KI to give 46% I [R1 = Me2CHCH2, R2 = (4-FC6H4)2CH(CH2)3].

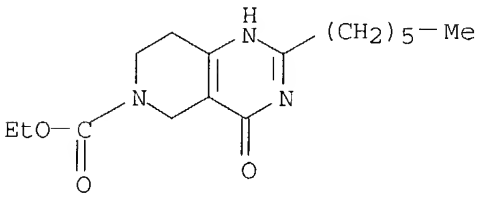
IT **109229-12-1P 109229-13-2P 109229-14-3P 109229-19-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deethoxycarbonylation of)

RN 109229-12-1 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-2-(3-methylbutyl)-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



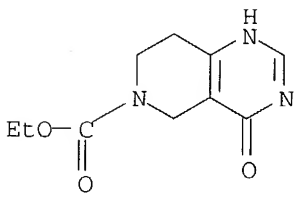
● HCl

RN 109229-13-2 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 2-hexyl-1,5,7,8-tetrahydro-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

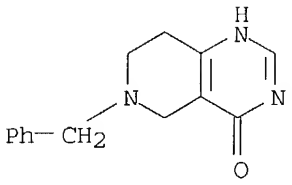


● HCl

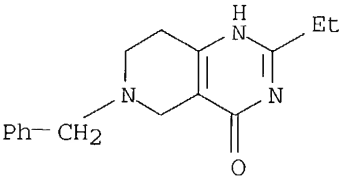
RN 109229-14-3 CAPLUS
CN Pyrido[4,3-d]pyrimidine-6(4H)-carboxylic acid, 1,5,7,8-tetrahydro-4-oxo-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



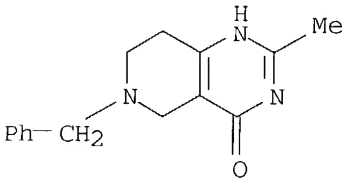
HCl



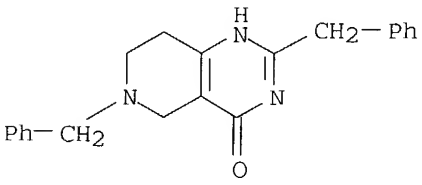
IT **1033-32-5 1448-40-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroformates)
RN 1033-32-5 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-ethyl-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 1448-40-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-methyl-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT **1168-28-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with iso-Pr chloroformate)
RN 1168-28-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2,6-bis(phenylmethyl)- (9CI) (CA INDEX NAME)



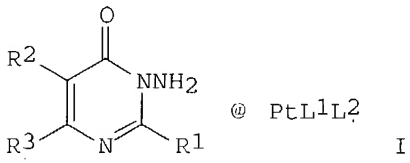
L7 ANSWER 35 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:443092 CAPLUS
DOCUMENT NUMBER: 105:43092

10/634,181

TITLE: 2,3-Diamino-substituted-4(3H)-pyrimidinones and platinum chelates
INVENTOR(S): Hlavka, Joseph J.; Bitha, Panayota; Lin, Yang-i
PATENT ASSIGNEE(S): American Cyanamid Co., USA
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4577018	A	19860318	US 1983-525531	19830822

PRIORITY APPLN. INFO.: US 1983-525531 19830822
OTHER SOURCE(S): CASREACT 105:43092
GI

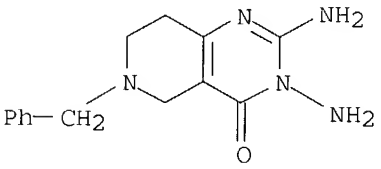


I

AB Platinum complexes I (R1 = NH2, NHNH2; R2 = H, alkyl, halo, PhCH2, HOCH2CH2; R3 = alkyl, CF3, Ph, 4-ClC6H4, 4-O2NC6H4; R2R3 = substituted alkylene or benzo, etc.; L1, L2 = halide, sulfate, nitrate, alkanoate; L1L2 = oxalate, malonate, methylmalonate, succinate, tartronate) were prepd. as antitumor agents. H2NC(:NH)NHNH2-HCl was treated with 4-O2NC6H4COCH2CO2Et, and the product was mixed with K tetrachloroplatinate to give I (R1 = NH2, R2 = H, R3 = 4-O2NC6H4, L1 = L2 = Cl)(II). In the lymphocytic leukemia P388 test with mice, II at 100 mg/kg i.p. increased the lifespan by 140%.

IT **103109-31-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with tetrachloroplatinate)

RN 103109-31-5 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(3H)-one, 2,3-diamino-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 36 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1985:442762 CAPLUS
DOCUMENT NUMBER: 103:42762
TITLE: Ionic reactions in carbon dioxide at atmospheric pressure. Relationship to radiolysis
AUTHOR(S): Yasumasa, Ikezoe; Shingo, Matsuoka; Shoichi, Sato
CORPORATE SOURCE: Japan At. Energy Res. Inst., Tokai, Japan

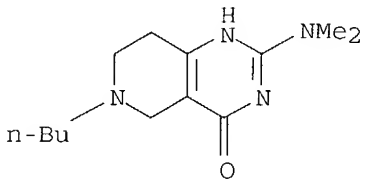
SOURCE: Shitsuryo Bunseki (1984), 32(5), 449R-453R
CODEN: SHIBAK; ISSN: 0542-8645
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

AB A review with 9 refs. on ionic reactions in atm.-pressure CO2. Exptl. observation and roles of a cluster ion (O2(CO)2)+(CO2)n are discussed.

IT **1218-16-2**
RL: PRP (Properties)
(formation of ion clusters contg., during ionic reactions in carbon dioxide atm.)

RN 1218-16-2 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 6-butyl-2-(dimethylamino)-5,6,7,8-tetrahydro- (9CI) (CA INDEX NAME)



L7 ANSWER 37 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1978:509556 CAPLUS
DOCUMENT NUMBER: 89:109556

TITLE: Pyridopyrimidine compounds

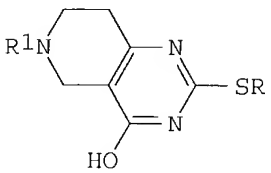
INVENTOR(S): Shiraki, Masami
PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53028193	A2	19780316	JP 1976-102887	19760828

PRIORITY APPLN. INFO.: JP 1976-102887 19760828

GI



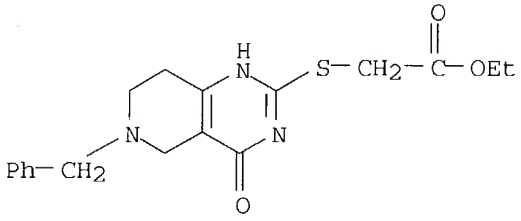
I, R=CHR2R3
II, R=H

AB Sixteen title compds. I [R1 = alkyl, aralkyl, acyl; R2 = H, alkyl; R3 = alkoxycarbonyl, carbamoyl, R4CO (R4 = (un)substituted Ph), R4ZCO (Z = NH, piperazine-1,4-diyl), R4CH(OH)] were prepd. by reaction of II with XCHR2R3 (X = halo). I had antiinflammatory, antipyretic, analgesic, anticholesteremic, and sedative activities; the rat liver lysosome stabilization activity of I is about 30% higher than that of ibuprofen and 10 times as high as that of aspirin. Thus, a mixt. of 10 g II (R1 = PhCH2) and 1.7 g 50% oil NaH in DMF was stirred 3,0 min at room temp., 7.3

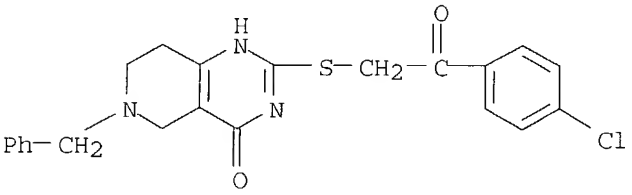
g BzCH2Br added, and the whole stirred 5 h at 60.degree. to give I (R1 = PhCH2, R2 = H, R3 = Bz).

IT **67140-14-1P 67140-15-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antiinflammatory activity of)

RN 67140-14-1 CAPLUS
CN Acetic acid, [[1,4,5,6,7,8-hexahydro-4-oxo-6-(phenylmethyl)pyrido[4,3-d]pyrimidin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

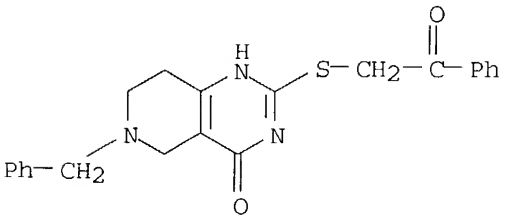


RN 67140-15-2 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-[[2-(4-chlorophenyl)-2-oxoethyl]thio]-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

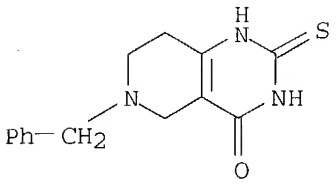


IT **67140-13-0P 67140-14-1P 67140-16-3P**
67140-17-4P 67140-18-5P 67140-19-6P
67140-20-9P 67140-21-0P 67140-22-1P
67140-23-2P 67140-24-3P 67140-25-4P
67236-66-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

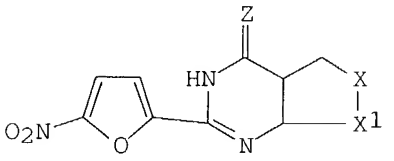
RN 67140-13-0 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-[(2-oxo-2-phenylethyl)thio]-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



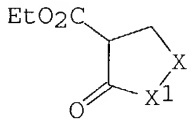
RN 67140-14-1 CAPLUS
CN Acetic acid, [[1,4,5,6,7,8-hexahydro-4-oxo-6-(phenylmethyl)pyrido[4,3-d]pyrimidin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



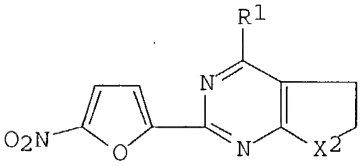
L7 ANSWER 38 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1977:29739 CAPLUS
DOCUMENT NUMBER: 86:29739
TITLE: Chemotherapeutic nitroheterocycles. 25. 2-(5-Nitro-2-furyl)-5,6,7,8-tetrahydroquinazolines and related compounds
AUTHOR(S): Albrecht, R.; Schumann, K.
CORPORATE SOURCE: Forschungslab., Schering A.-G., Berlin, Fed. Rep. Ger.
SOURCE: European Journal of Medicinal Chemistry (1976), 11(2), 155-8
CODEN: EJMCA5; ISSN: 0223-5234
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 86:29739
GI



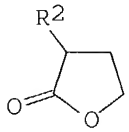
I



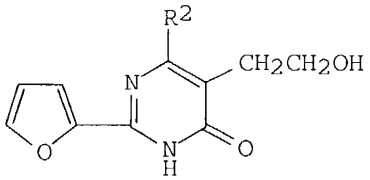
II



III



IV



V

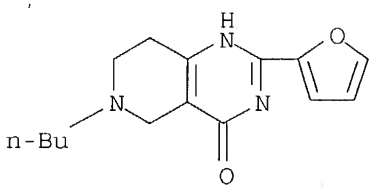
AB Fused pyrimidines I [XX1 = (CH2)2, (CH2)3, NBuCH2CH2; Z = O] were prepd. by treating 2-furamidine-HCl with NaOEt and II and nitrating the product. Chlorination of I [XX1 = (CH2)3] gave quinazoline III, which was aminated to give III [R = NH2, NHMe, pyrrolidino-HCl, morpholino-HCl, NHCH2CH2NMe2-2HCl; X2 = (CH2)2]. 2-Furamidine-HCl and furanones IV (R2 = CO2Et, Ac, cyano) gave pyrimidinones V (R2 = OH, Me, NH2), which were cyclized with concd. H2SO4 and the products nitrated to give III (R1 = R2 of V, X2 = O). Also prepd. was I [XX1 = (CH2)2, Z = S]. III (R1 = Cl, Me, basic substituent) had min. inhibitory concns. against Trichomonas

vaginolis of 0.05-1.6 .mu.g/ml.

IT **61378-79-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and nitration of)

RN 61378-79-8 CAPLUS

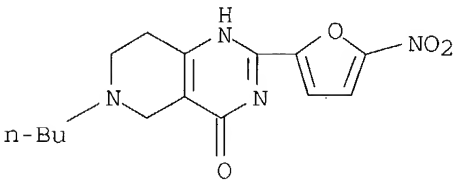
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 6-butyl-2-(2-furanyl)-5,6,7,8-tetrahydro- (9CI) (CA INDEX NAME)



IT **61378-82-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 61378-82-3 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 6-butyl-5,6,7,8-tetrahydro-2-(5-nitro-2-furanyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 39 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1969:438993 CAPLUS

DOCUMENT NUMBER: 71:38993

TITLE: 6-Acetyl-4-hydroxy-2-mercapto-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine

INVENTOR(S): Mayer, Julian R.

PATENT ASSIGNEE(S): Sterling Drug Inc.

SOURCE: U.S., 2 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

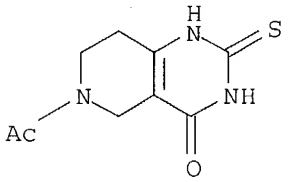
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3444168	A	19690513	US 1966-605954	19661230

PRIORITY APPLN. INFO.: US 1966-605954 19661230

GI For diagram(s), see printed CA Issue.

AB The title compd. (I), useful as a psychomotor stimulant and depressant, was prepd. Et 1-acetyl-4-oxo-3-piperidinecarboxylate (6.5 g.) in 75 cc. H2O was treated with 2.3 g. thiourea at 70.degree. in the presence of 4.1 g. of K2CO3; the soln. was heated 45 min. at 95.degree., the pH adjusted to 8 by the addn. of AcOH, the ppt. filtered and worked up to give 4.9 g. I, m. >300.degree..

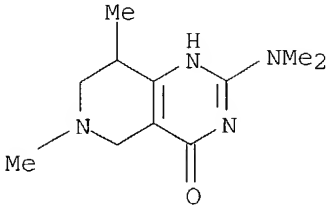
IT **23352-41-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 23352-41-2 CAPLUS
CN Ketone, 7,8-dihydro-4-hydroxy-2-mercaptopyrido[4,3-d]pyrimidin-6(5H)-yl methyl (8CI) (CA INDEX NAME)



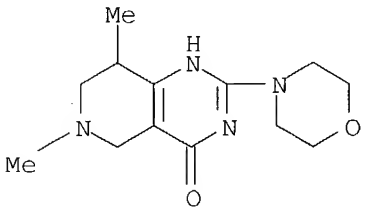
L7 ANSWER 40 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1967:473618 CAPLUS
DOCUMENT NUMBER: 67:73618
TITLE: 4-Hydroxy-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine substitution products
INVENTOR(S): Ohnacker, Gerhard
PATENT ASSIGNEE(S): Boehringer Ingelheim G.m.b.H.
SOURCE: U.S., 14 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3306901		19670228		

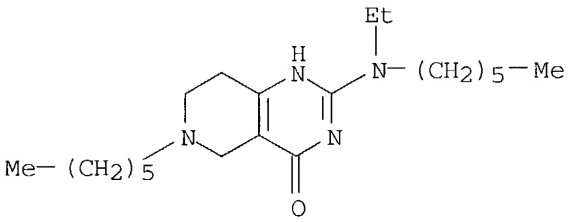
PRIORITY APPLN. INFO.: DE 19620322
GI For diagram(s), see printed CA Issue.
AB The subject compds., which exhibit antiphlogistic, antipyretic, diuretic, bacteriostatic, sedative, and coronary dilating activities, have the general formula I. I is prepd. by treating a pyridonecarboxylic acid lower alkyl ester or its addn. salt with an amidine or its inorg. or org. addn. salt. Thus, 22.2 g. Me 1,5-dimethyl-4-piperidone-3-carboxylate-HCl, 19.1 g. phenylacetamidine-HCl, and 20.8 g. K2CO3 were each dissolved in 50 ml. H2O and the solns. combined and heated to 60.degree. a short time to give 20 g. I (R = Me, R1 = Me, R2 = PhCH2), m. 193-5.degree. (MeOH). Also prepd. are the following I (R, R1, R2, and m.p. given): Me, H, SEt, 156-7.degree.; Me, Me, SMe, 212.degree.; Me, Me, NBu2, 134-5.degree.; Bu, H, NHC6H13, 129.degree.; Et, H, SMe, 187.degree.; Pr, H, SMe, 198-9.degree.; Pr, H, SEt, 132.degree.; iso-Pr, H, SEt, 153.degree.; Bu, H, SMe, 184.degree.; iso-Bu, H, SMe, 207-8.degree.; Me, H, CH2Ph, 218-19.degree.; Me, Me, Me, 177-9.degree.; Et, H, CH2Ph, 177-8.degree.; Pr, H, Me, 165-7.degree.; iso-Pr, H, CH2Ph, 163-5.degree.; Bu, H, Me, 146-7.degree.; Bu, H, CH2Ph, 113-14.degree.; Pr, H, Bu, 109-11.degree.; Me, H, NBu2, 135-7.degree.; Me, H, piperidino, 231.degree.; Me, H, morpholino 222-3.degree.; Me, Me, NMe2, 185-6.degree.; Me, Me, morpholino, 197-8.degree.; Et, H, NBu2, 94-6.degree.; Et, H, NMe2, 56-7.degree.; Et, H, 1-pyrrolidinyl, 190-2.degree.; Et, H, piperidino, 170.degree.; Et, H, morpholino, 186.degree.; Et, H, 4-methylpiperazino, 162-3.degree.; Pr, H, 1-pyrrolidinyl, 182-4.degree.; Pr, H, piperidino, 184-5.degree.; Pr, H, morpholino, 186-7.degree.; Pr, H, 4-methylpiperazino, 148-50.degree.; Pr, H, piperidino, 209-11.degree.; Pr, H, morpholino, 230-2.degree.; Bu, H, NBu2, 104.degree.; Bu, H, pyrrodinyl, 172-3.degree.; Bu, H, piperidino,



RN 15637-75-9 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-6,8-dimethyl-2-morpholino- (8CI) (CA INDEX NAME)



RN 15641-78-8 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 2-(ethylhexylamino)-6-hexyl-5,6,7,8-tetrahydro- (8CI) (CA INDEX NAME)

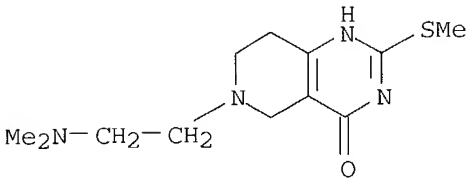


L7 ANSWER 41 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1966:447757 CAPLUS
DOCUMENT NUMBER: 65:47757
ORIGINAL REFERENCE NO.: 65:8932c-h,8933a-e
TITLE: 5,6,7,8-Tetrahydropyrido [4,3-d] pyrimidines
PATENT ASSIGNEE(S): Dr. Karl Thomae G.m.b.H., Neth.
SOURCE: 9 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

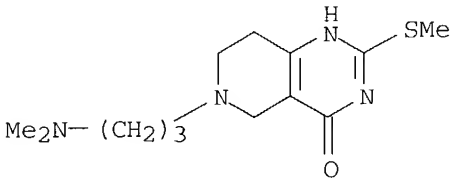
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6602499		19660525	NL	19660225

GI For diagram(s), see printed CA Issue.
AB The title compds., I, were prepd., where R = H or Me, R' is an aryl, aralkyl, cycloalkyl, or dialkylaminoalkyl group, and R" is an amino or substituted amino group. The I exhibit antiinflammatory, antipyretic, diuretic, bacteriostatic, sedative, and coronary dilating activity. The

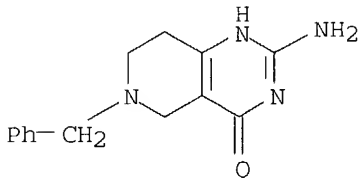
2-(methylthio)- (8CI) (CA INDEX NAME)



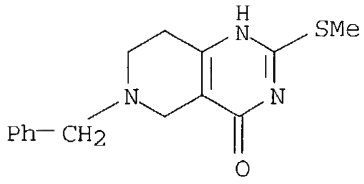
RN 1029-50-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 6-[3-(dimethylamino)propyl]-5,6,7,8-tetrahydro-2-(methylthio)- (7CI, 8CI) (CA INDEX NAME)



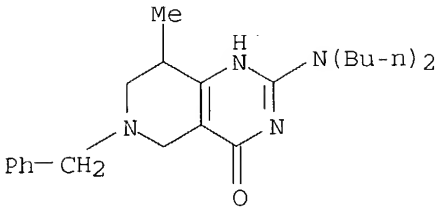
RN 1029-52-3 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-amino-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 1033-34-7 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-(methylthio)-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 1033-39-2 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 2-amino-5,6,7,8-tetrahydro-6-phenethyl- (7CI, 8CI) (CA INDEX NAME)



L7 ANSWER 42 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1966:27641 CAPLUS
DOCUMENT NUMBER: 64:27641
ORIGINAL REFERENCE NO.: 64:5121g-h,5122a-f
TITLE: Benzodiazepines
INVENTOR(S): Reeder, Earl; Sternbach, Leo H.
PATENT ASSIGNEE(S): Hoffmann-La Roche Inc.
SOURCE: 5 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3222359		19651207	US	19610728
GB 1017277			GB	

GI For diagram(s), see printed CA Issue.

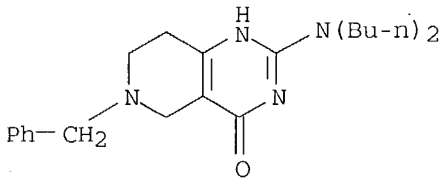
AB The title compds., characterized as 5-phenyl-1,2-dihydro-3H-1,4-benzodiazepines (I), which are useful as muscle relaxants, sedatives, and anticonvulsants, were produced by reacting an alkylene-1,2-diamine with a benzophenone contg. a halogen substituent ortho to the CO group. To a clear soln. of 80 g. NaNO2 in 460 ml. concd. H2SO4, 200 g. 2-chloro-5-trifluoromethylaniline was slowly added at 10-20.degree., stirred 1 hr. at 20.degree., poured into a mixt. of 200 g. NaCl and 1.6 kg. ice, and the excess NaCl filtered off. A soln. of 280 g. ZnCl2 in 300 ml. H2O was added to the filtrate, kept at 0.degree. overnight and the pptd. double salt of the corresponding diazonium compd. collected (291 g.) and added to a soln. of 120 g. NaCN and 72 g. CuCN in 300 ml. H2O. Na2CO3 (24 g.) was added, the mixt. was stirred 1 hr. at 20, 0.5 hr. at 70.degree., cooled, and extd. with Et2O to give 2-chloro-5-trifluoromethylbenzonitrile (II). A soln. of 39 g. II in 200 ml. C6H6 was added with stirring to a soln. of PhMgBr prepd. from 9.5 g. Mg, 58.5 g. PhBr, and 500 ml. anhyd. Et2O. The solvent (44 ml.) was distd., the residual mixt. refluxed 16 hrs., treated with 40 g. NH4Cl and 200 g. ice, and extd. with C6H6 which was treated with 40 ml. concd. HCl to give 2-chloro-5-trifluoromethylbenzophenone (III) imine-HCl (IIIa), m. 250-62.degree.. A mixt. of 60 g. IIIa, 300 ml. PhMe, and 300 ml. 25% H2SO4 was refluxed overnight to yield III, m. 39-40.degree. (cor.). A soln. of 82.1 g. III in 300 ml. anhyd. C5H5N was treated with 89.9 g. H2NCH2CH2NH2 (IV), refluxed 5 hrs. with stirring, allowed to cool overnight, evapd. in vacuo, the residue dissolved in 500 ml. 0.6N HCl and extd. with Et2O. The cooled aq. layer was made basic with 3N NaOH to yield I (R = H, R' = 7-F3C) (Ia), m. 110-11.degree. (hexane); Ia.HCl m. 283-5.degree. (MeOH-Et2O). The following I were similarly prepd. from the appropriate diamine and appropriate benzophenone (given R, R', m.p., and crystn. solvent): H, 7-NO2 (Ib), 211-12.degree., Me2CO; H, H, 144-6.degree., hexane; H, 7-Cl, 170-1.degree., Et2O; Me, 7-NO2 (Ic), 249-50.degree., CH2Cl2. To a soln. of 160 g. Ib in 1.6 l. HCONMe2 was added 35.6 g. NaOMe, the mixt. stirred I hr. at room temp., and treated

with 65.2 ml. Me_2SO_4 and stirred 2 hrs. to give 1-methyl-7-nitro-5-phenyl-1,2-dihydro-3H-1,4-benzodiazepine, m. 187-8.degree.. A soln. of 2 g. Ic in 40 ml. 3N HCl was refluxed 21 hrs., cooled, made alk. with dil. NaOH soln., and extd. with CH_2Cl_2 to yield 2-(2-aminopropylamino)-5-nitrobenzophenone (V), m. 98-9.degree.; HCl salt m. 204-5.degree.. A soln. of V in C_5H_5N was recycled by refluxing to give Ic again. A suspension of 28.1 g. Ic in 250 cc. MeOH was hydrogenated at room temp. and atm. pressure in the presence of 6 g. wet Raney Ni to yield 1.2HCl (R = Me, R' = 7-NH_2) (Id.2HCl), m. 277-80.degree. (decompn.); Id m. 128-9.degree.. Ib was similarly converted to 2-(2-aminoethylamino)-5-nitrobenzophenone (VI).HCl, m. 225-7.degree.. VI.HCl was converted to VI, m. 118-19.degree., which was then recyclized as above to Ib. A stirred suspension of 0.76 g. $LiAlH_4$ in 25 ml. dry tetrahydrofuran (THF) was added to a soln. of 2.84 g. 7-chloro-3-methyl-5-phenyl-3H-1,4-benzodiazepin-2(1H)-one in 50 ml. THF, refluxed 25 min., treated with ice, and worked up in the usual manner to yield I (R = Me, R' = 7-Cl) (Ie), m. 127-8.degree.. To a cooled, stirred soln. of 6.4 g. Id.2HCl in 30 ml. 6N HCl was added within 10 min. 20 ml. N $NaNO_2$ at 5.degree.. The soln. was stirred 15 min. at 0.degree. and added within 5 min. to a stirred soln. (28.degree.) of 4 g. CuCl in 40 ml. concd. HCl, stirred 15 min. at room temp., 30 min. at 40.degree., and 20 min. at 85-90.degree.. The cooled soln. was treated with excess NH_4OH and extd. with CH_2Cl_2 to give Ie. III (22 g.) in 250 ml. anhyd. C_5H_5N and 210 g. IV yielded a mixt. of 2,3-dihydro-5-phenyl-7-trifluoromethyl-1H-1,4-benzodiazepine and 2-(2-aminoethylamino)-5-trifluoromethyl-benzophenone which was refluxed in C_5H_5N to yield 2,3-dihydro-5-phenyl-7-trifluoromethyl-1H-1,4-benzodiazepine, m. 116-18.degree. (hexane), which is a dimorphic cryst. form of Ia. The two are interconvertible.

IT **1054-26-8**, Pyrido[4,3-d]pyrimidin-4-ol, 6-benzyl-2-(dibutylamino)-5,6,7,8-tetrahydro-
(prepn. of)

RN 1054-26-8 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4-ol, 6-benzyl-2-(dibutylamino)-5,6,7,8-tetrahydro- (7CI, 8CI) (CA INDEX NAME)



L7 ANSWER 43 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1966:27617 CAPLUS

DOCUMENT NUMBER: 64:27617

ORIGINAL REFERENCE NO.: 64:5112d-g

TITLE: 2-Amino-3,5-dialkyl-6-phenyl-4(3H)-pyrimidinones

PATENT ASSIGNEE(S): G. D. Searle & Co.

SOURCE: 8 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1003802		19650908	GB	

PRIORITY APPLN. INFO.: US 19630604

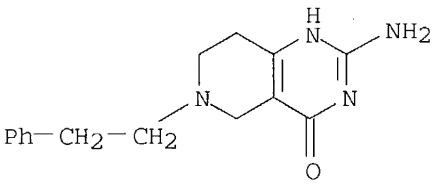
GI For diagram(s), see printed CA Issue.

AB The title compds. are prepd. and can be used as diuretics. Thus, a mixt. of 30 parts 2-amino-5-methyl-6-phenyl-4-pyrimidinol, 80 parts MeI, 12 parts KOH, and 160 parts EtOH is refluxed 1.25 hrs. to give 2-amino-3,5-dimethyl-6-phenyl-4(3H)-pyrimidinone, m. 216-17.degree. (EtOH). Similarly prepd. are the following I (Ar = Ph) (R, R1, and m.p. given): Et, Me, 184.5-86.degree. (40% EtOH); Pr, Me, 240-2.degree.; n-octyl, Me, 199-200.degree. (EtOH); allyl, Me, 177-9.degree. (EtOH); HC.tplbond.CCH2, Me, .apprx.215.degree. (MeOH); HC.tplbond.CCH2, HC.tplbond.CCH2, 220-2.degree.; HOCH2CH2, Me, 217-18.degree.; HO(CH2)3, Me, .apprx.202.degree.; MeCH(OH)CH2, Me, .apprx.170.degree.; HOCH2CH2, allyl, 193-4.degree.; HOCH2CH2, HC.tplbond.CCH2, 206-8.degree.; MeO(CH2)3, Me, --; EtOCH2CH2, Me, 172-3.degree.; PhOCH2CH2, Me, 184-5.degree.; PhO(CH2)3, Me, --; HOCH2CH2, EtOCH2CH2, 135-6.degree.; HOCH2CH2, Et, 210-12.degree.; HOCH2CH2, Pr, 183-4.degree.; HOCH2CH2, Bu, 183-4.degree.; HOCH2CH2, HOCH2, 240-1.degree.; Me2NCH2CH2, Me, 195-7.degree. (MeOH); 2-piperidinoethyl, Me, 203-5.degree.; 3-pyrrolidinylpropyl, Me, --; 2-morpholinoethyl, Me, 234-5.degree.; 3-morpholinopropyl, Me, --. Similarly prepd. is I (R = HOCH2CH2, R1 = Me, Ar = p-ClC6H4), m. 213-15.degree. (EtOH). A mixt. of 30 parts 3-(2-hydroxyethyl)-5-methyl-2-ethylthio-6-phenyl-4(3H)-pyrimidinone, 100 parts NH3, and 320 parts EtOH is heated 16 hrs. at 150.degree. in a closed reactor to give I (R = HOCH2CH2, R1 = Me, Ar = Ph), m. 220-2.degree. (MeOH). Similarly prepd. are (m.p. given): I (R = HOCH2CH2, R1 = HC.tplbond.CCH2, Ar = Ph), 206-8.degree.; I (R = HOCH2CH2, R1 = EtOCH2CH2, Ar = Ph), 135-6.degree..

IT **1033-39-2**, Pyrido[4,3-d]pyrimidin-4-ol, 2-amino-5,6,7,8-tetrahydro-6-phenethyl-
(prepn. of)

RN 1033-39-2 CAPLUS

CN Pyrido[4,3-d]pyrimidin-4-ol, 2-amino-5,6,7,8-tetrahydro-6-phenethyl- (7CI, 8CI) (CA INDEX NAME)



L7 ANSWER 44 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1966:27616 CAPLUS

DOCUMENT NUMBER: 64:27616

ORIGINAL REFERENCE NO.: 64:5111e-h,5112a-d

TITLE: 5,6,7,8 - Tetrahydropyrido[4,3 - d]pyrimidines

PATENT ASSIGNEE(S): Dr. Karl Thomae G.m.b.H.

SOURCE: 13 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

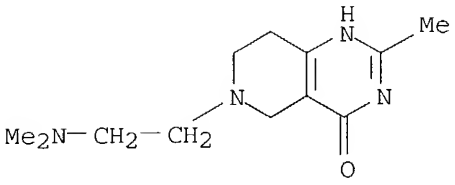
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

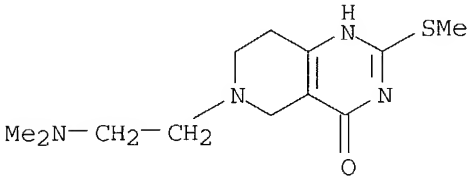
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6400580		19650726	NL	19640124

GI For diagram(s), see printed CA Issue.

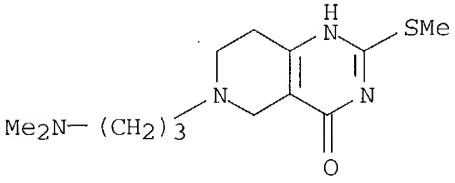
AB I have therapeutic value. II (prepd. by known methods, but not always isolated) and salts of RC(:NH)NH2 (III) gave I. The following II (R = H) were used (R1 and m.p. of HCl salt given): Ph, 146.degree.; CH2Ph (IV),



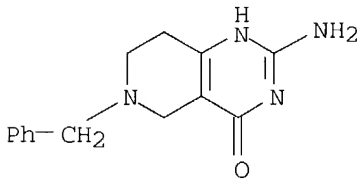
RN 1026-34-2 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 6-[2-(dimethylamino)ethyl]-5,6,7,8-tetrahydro-2-(methylthio)- (8CI) (CA INDEX NAME)



RN 1029-50-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 6-[3-(dimethylamino)propyl]-5,6,7,8-tetrahydro-2-(methylthio)- (7CI, 8CI) (CA INDEX NAME)



RN 1029-52-3 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-amino-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



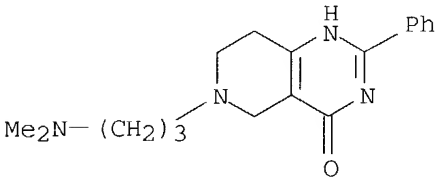
RN 1029-53-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-6-phenethyl- (7CI, 8CI) (CA INDEX NAME)

10/634,181

CN Pyrido[4,3-d]pyrimidin-4-ol, 6-[3-(dimethylamino)propyl]-5,6,7,8-tetrahydro-2-phenyl-, oxalate (1:2) (8CI) (CA INDEX NAME)

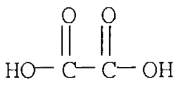
CM 1

CRN 1044-04-8
CMF C18 H24 N4 O



CM 2

CRN 144-62-7
CMF C2 H2 O4

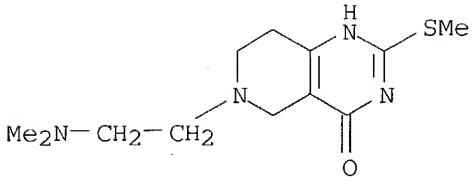


L7 ANSWER 45 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1965:424196 CAPLUS
DOCUMENT NUMBER: 63:24196
ORIGINAL REFERENCE NO.: 63:4312c-h,4313a
TITLE: 5,6,7,8 - Tetrahydropyrido[4,3 - d]pyrimidines
INVENTOR(S): Ohnacker, Gerhard
PATENT ASSIGNEE(S): Boehringer Ingelheim G.m.b.H.
SOURCE: 14 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

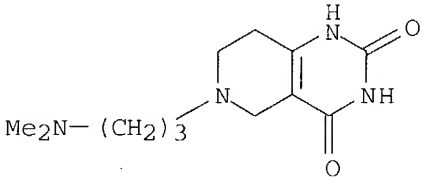
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3186991		19650601	US	
PRIORITY APPLN. INFO.:			DE	19620322

GI For diagram(s), see printed CA Issue.

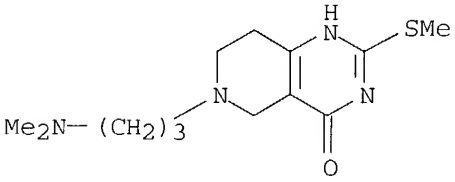
AB The following piperidonecarboxylic acid alkyl esters (I) were prepd. by means of the Dieckmann reaction from iminodipropionic acid alkyl esters and NaNH2 or metallic Na (R and m.p. of hydrochloride given): Ph, 146.degree.; PhCH2 (Ia), 182.degree.; PhCH2CH2, 166.degree.; Me2NCH2CH2, 200.degree.; Me2N(CH2)3, 186.degree.; Et2NCH2CH2, 174.degree.; Et2N(CH2)3, 154.degree.. Also prepd. was II.HCl, m. 194.degree.. Tetrahydropyridopyrimidines (III) were prepd. as follows. A soln. of 29.7 g. Ia, 9.5 g. MeC(NH2):NH, and 27.6 g. K2CO3 in 150 ml. H2O was stirred at 50.degree. for 5 hrs. and 25.degree. for 15 hrs. to yield 9.6 g. III (R = PhCH2, R1 = Me), m. 195-7.degree. (EtOH). The following III were similarly prepd. from the appropriate carboxylic acid ethyl ester dihydrochloride and amidine (R, R1, and m.p. given): Me2N(CH2)3, CH2Ph, 135.degree.; PhCH2, Ph, 245.degree.; Me2NCH2CH2, Ph, 172-4.degree.;



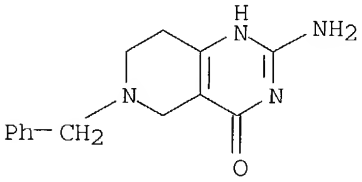
RN 1026-37-5 CAPLUS
CN Pyrido[4,3-d]pyrimidine-2,4-diol, 6-[3-(dimethylamino)propyl]-5,6,7,8-tetrahydro- (8CI) (CA INDEX NAME)



RN 1029-50-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 6-[3-(dimethylamino)propyl]-5,6,7,8-tetrahydro-2-(methylthio)- (7CI, 8CI) (CA INDEX NAME)



RN 1029-52-3 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-amino-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 1029-53-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-6-phenethyl- (7CI, 8CI) (CA INDEX NAME)

ACCESSION NUMBER: 1965:51723 CAPLUS
DOCUMENT NUMBER: 62:51723
ORIGINAL REFERENCE NO.: 62:9150h,9151a-b
TITLE: Ethers of 2-amino-5-methyl-6-phenylpyrimidines
INVENTOR(S): Wagner, Hans A.
PATENT ASSIGNEE(S): G. D. Searle & Co.
SOURCE: 2 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

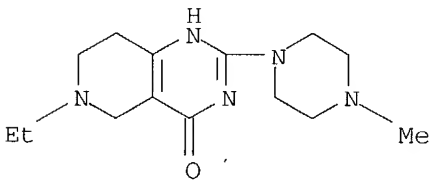
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3167553		19650126	US	19630508

GI For diagram(s), see printed CA Issue.

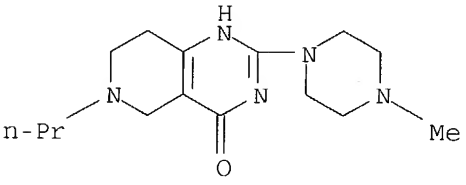
AB The title compds. were antibiotics. To a soln. of Na 23 in CH2(OH)CH2OH 1500 was added 2-amino-4-chloro-5-methyl-6-phenylpyrimidine 219, the mixt. poured into H2O 20,000 parts, and the solid filtered off to give 2-amino-4-(2-hydroxyethoxy)-5-methyl-6-phenylpyrimidine, m. 143.degree. (MeOH). Similarly prepd. were the following I (R and m.p. given): (CH2)3OH, 140-1.degree.; (CH2)2NH2, 172-3.degree.; (CH2)2NMe2, 75-6.degree.; (CH2)3NEt2, --; and (CH2)2OPh, 155-6.degree..

IT **1032-79-7**, Pyrido[4,3-d]pyrimidin-4-ol, 6-ethyl-5,6,7,8-tetrahydro-2-(4-methyl-1-piperazinyl)- **1036-80-2**, Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-2-(4-methyl-1-piperazinyl)-6-propyl- **1040-26-2**, Pyrido[4,3-d]pyrimidin-4-ol, 6-butyl-5,6,7,8-tetrahydro-2-(4-methyl-1-piperazinyl)- **1233-58-5**, Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-6-isobutyl-2-(4-methyl-1-piperazinyl)-
(prepn. of)

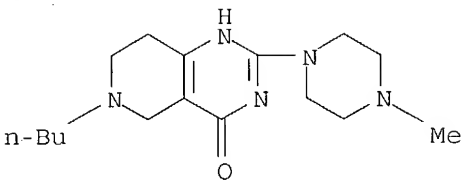
RN 1032-79-7 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 6-ethyl-5,6,7,8-tetrahydro-2-(4-methyl-1-piperazinyl)- (7CI, 8CI) (CA INDEX NAME)



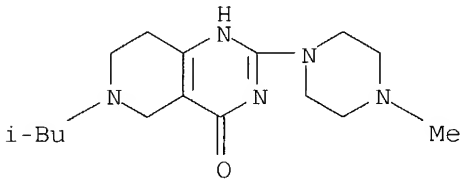
RN 1036-80-2 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-2-(4-methyl-1-piperazinyl)-6-propyl- (7CI, 8CI) (CA INDEX NAME)



RN 1040-26-2 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 6-butyl-5,6,7,8-tetrahydro-2-(4-methyl-1-piperazinyl)- (7CI, 8CI) (CA INDEX NAME)



RN 1233-58-5 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-6-isobutyl-2-(4-methyl-1-piperazinyl)- (7CI, 8CI) (CA INDEX NAME)



L7 ANSWER 47 OF 48 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1965:51722 CAPLUS
DOCUMENT NUMBER: 62:51722
ORIGINAL REFERENCE NO.: 62:9150b-h
TITLE: 5,6,7,8 - Tetrahydropyrido[4,3 -d]pyrimidines
PATENT ASSIGNEE(S): Dr. Karl Thomae G.m.b.H.
SOURCE: 16 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR M2928		19641214	FR	
GB 1033383			GB	
PRIORITY APPLN. INFO.:			DE	19620322

GI For diagram(s), see printed CA Issue.
AB Alkyl 4-piperidone-3-carboxylates are treated with an amidine of the general formula RC(:NH)NH2, where R is an alkyl, alkylthio, or amino group, in the presence of base to give compds. of the general formula I, which can be used as antipyretic, diuretic, and bacteriostatic agents and as sedatives. Thus, 22.2 g. Me 1,5-dimethyl-4-piperidone-3-carboxylate-HCl in 50 ml H2O was mixed with 19.1 g. PhCH2C(:NH)NH2.HCl in 50 ml. H2O and 20.8 g. K2CO3 in 50 ml. H2O, and the mixt. heated a short time at 60.degree. and kept several hrs. to give 20 g. 2-benzyl-4-hydroxy-6,8-dimethyl-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine, m. 193-5.degree. (MeOH). Similarly prepd. were the following I (R, R1, R2, and m.p. given): H, Me, EtS, 156-7.degree. (EtOAc); 8-Me, Me, MeS, 212.degree. (EtOH); H, Et, MeS, 187.degree.; H, Pr, MeS, 198-9.degree.; H, Pr, EtS, 132.degree.; H, iso-Pr, EtS, 153.degree.; H, Bu, EtS, 184.degree.; H, iso-Bu, EtS, 207-8.degree.; H, Me, PhCH2, 218-19.degree.; 4-Me (sic), Me, Me, 197-9.degree.; H, Et, PhCH2, 177-8.degree.; H, Pr, Me, 165-7.degree.; H, iso-Pr, PhCH2, 163-5.degree.; H, Bu, Me, 146-7.degree.; H, Bu, PhCH2, 113-14.degree. (malonate m. 151-3.degree.); H, Pr, Bu, 109-10.degree.; H, Me, NBu2, 135-7.degree.; 4-Me (sic), Me, NMe2, 185-6.degree.; H, Et, NMe2, 56-7.degree.; H, hexyl,

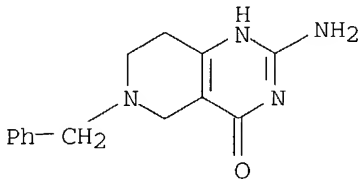
DOCUMENT NUMBER: 62:36868
ORIGINAL REFERENCE NO.: 62:6493b-g
TITLE: 5,6,7,8-Tetrahydropyrido[4,3-d]pyrimidines
PATENT ASSIGNEE(S): Dr. Karl Thomae G.m.b.H.
SOURCE: 18 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR M2798		19641019	FR	
BE 642910			BE	
GB 1028405			GB	

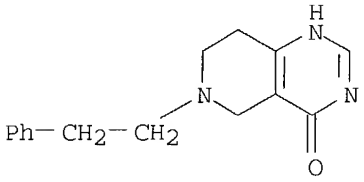
PRIORITY APPLN. INFO.: DE 19620322

AB The title compds. (I) were prepd. by alk. condensation of an amidine with a substituted 3-carbethoxy-4-piperidone. Thus, a soln. of 29.7 g. Et N-benzyl-4-piperidone-3-carboxylate-HCl, 9.5 g. acetamidine-HCl, and 27.6 g. K2CO3 in 50 ml. H2O was stirred 5 hrs. at 50.degree. and 15 hrs. at 25.degree. to give 9.6 g. I (R = H, R1 = PhCH2, R2 = Me) (Ia), m. 195-7.degree. (EtOH). The tabulated I were prepd. in a similar manner. Similarly were prepd. the 4-Me analogs of Ia, m. 177-8.degree., of II, m. 194-5.degree., and of III, m. 128-9.degree.. I had antiinflammatory, antipyretic, diuretic, bacteriostatic, sedative, and coronary dilatory activity. R, R1, R2, m.p., R, R1, R2, m.p.; H, Me2N(CH2)3, PhCH2, 135.degree., H, PhCH2, Ph (II), 245.degree.; H, Me2N(CH2)2, Ph, 172-4.degree., H, Et2N(CH2)3, Ph, 117.degree.; H, PhCH2, NH2, 269-70.degree., H, PhCH2, Q, 240.degree.; H, Ph, Q, 260-1.degree., H, PhCH2, MeS, 211-12.degree.; 8-Me, PhCH2, EtS, 156-7.degree., H, Ph(CH2)2, EtS, 203-4.degree.; H, Me2N(CH2)2, PhCH2S, 168-9.degree., H, PhCH2, PhNH, 249-51.degree.; H, Et2N(CH2)2, Z, 106-7.degree., H, Ph, Ph, 302-4.degree.; H, MeO(CH2)3, Ph, 143.degree., H, Me2N(CH2)3, OH, 244-5.degree.; H, Ph, MeS, 234-5.degree., H, cyclohexyl, MeS, 253.degree.; H, Me2N(CH2)2, MeS, 180.degree., H, Me2N(CH2)3, MeS, 139.degree.; H, Et2N(CH2)2, MeS, 178-9.degree., H, Et2N(CH2)3, MeS, 126-7.degree.; H, Et2N(CH2)2, PhCH2S, 135-6.degree., H, Me2N(CH2)3, PhCH2S, 151.degree.; H, PhCH2, PhCH2, 227-8.degree., H, Me2N(CH2)2, Me, 107-8.degree.; H, Me2N(CH2)2, PhCH2, 171-2.degree., H, Me2N(CH2)3, Ph, 150-1.degree.; , , , , , , , (dioxalate m. 223-5.degree.); H, Et2N(CH2)2, Ph, 141-2.degree., H, Et2N(CH2)2, PhCH2, 136-8.degree.; H, Et2N(CH2)3, PhCH2, 106-8.degree., H, Ph, Z, 261-2.degree.; H, Ph, Q, 260-1.degree., H, Ph, 4-methylpiperazino, 268-9.degree.; H, PhCH2, PrNOMe, 162-3.degree., H, PhCH2, Bu2N (III), 104.degree.; H, Ph(CH2)2, Bu, 161-2.degree., H, PhCH2, Y, 233-5.degree.; H, PhCH2, Z, 220-2.degree., H, PhCH2, 4-methylpiperazino, 218.degree.; , , , , , , , [tartrate m. 140.degree. (decompn.)]; H, PhCH2, 4-(.beta.-hydroxyethyl)-piperrazino, 227-8.degree., H, PhCH2, cyclohexylamino, 95-6.degree.; H, PhCH2, PhCH2NMe, 181-2.degree., H, Ph(CH2)2, Q, 226.degree.; H, Ph(CH2)2, 4-methylpiperazino, 177-8.degree., H, cyclohexy, Q, 231-3.degree.; H, cyclohexyl, 4-methylpiperazino, 213-15.degree., H, Me2N(CH2)3, Y, 143.degree.; H, Me2N(CH2)3, Z, 142.degree., H, Me2N(CH2)3, Q, 168.degree.; H, Et2N(CH2)2, Y, 134-5.degree., H, Et2N(CH2)2, Z, 106-7.degree.; H, Et2N(CH2)2, Q, 144-5.degree., H, Et2N(CH2)2, 4-methylpiperazino, 142-3.degree.; H, Et2N(CH2)3, Z, 89-90.degree., H, Et2N(CH2)3, Q, 103-4.degree.; H, PhCH2, hexylamino, 152-3.degree., H, PhCH2, Me2N(CH2)3, 173-5.degree.; 7-Me, PhCH2, Me2N, 233-5.degree., H, PhCH2, Me2N, 218.degree.; H, Ph(CH2)2, Me2N, 200-1.degree., 8-Me, PhCH2, Me2N, 157-9.degree.; H, PhCH2, Pr, 147-8.degree., H, PhCH2, Et, 172-4.degree.; H, PhCH2, Bu, 147-8.degree., H, PhCH2, iso-Pr, 187-8.degree.; 7-Me, PhCH2, Pr, 148-50.degree., 7-Me, PhCH2, Et, 169-70.degree.; 7-Me, PhCH2, PhCH2, 174-6.degree., 7-Me, PhCH2, Bu,

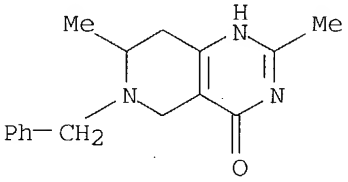
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 2-amino-5,6,7,8-tetrahydro-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



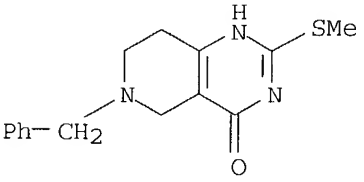
RN 1029-53-4 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-6-phenethyl- (7CI, 8CI) (CA INDEX NAME)



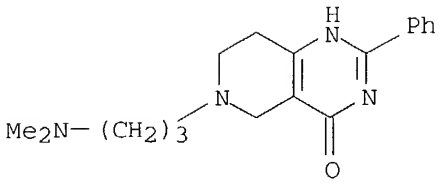
RN 1033-19-8 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 6-benzyl-5,6,7,8-tetrahydro-2,7-dimethyl- (7CI, 8CI) (CA INDEX NAME)



RN 1033-34-7 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4(1H)-one, 5,6,7,8-tetrahydro-2-(methylthio)-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 1033-38-1 CAPLUS
CN Pyrido[4,3-d]pyrimidin-4-ol, 5,6,7,8-tetrahydro-2-methyl-6-phenethyl- (7CI, 8CI) (CA INDEX NAME)



CM 2

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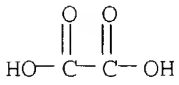

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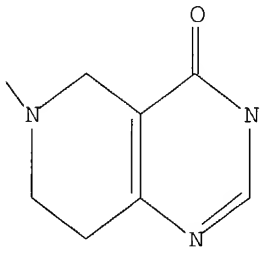

Structure attributes must be viewed using STN Express query preparation.

PALM INTRANET

Day : Friday
Date: 1/23/2004
Time: 16:51:52

Inventor Name Search Result

Your Search was:

Last Name = LI
First Name = JIE

Application#	Patent#	Status	Date Filed	Title	Inventor Name 51
60526007	Not Issued	020	12/02/2003	BULK SORTING OF DESICCATION-TOLERANT CONIFER SOMATIC EMBRYOS	LIU, JIE
60515256	Not Issued	018	01/01/0001	DELIVERY OF IMMUNE RESPONSE MODIFIER COMPOUNDS USING METAL-CONTAINING PARTICULATE SUPPORT MATERIALS	LIU, JIE J.
60507913	Not Issued	020	09/30/2003	STRUCTURE OF THE HIV TRIMERIZATION DOMAIN AND ITS USE FOR DEVELOPING INHIBITORS OF HIV INFECTION	LIU, JIE
60349002	Not Issued	159	01/14/2002	METHOD AND SYSTEM FOR BURST TRANSMISSION AND ACKNOWLEDGMENT	LIANG, JIE
60333969	Not Issued	159	11/29/2001	NOVEL MODEL FOR DISCOVERY OF GENE FUNCTION BY PROTEIN SURFACE MATCHING	LIANG, JIE T.
60311014	Not Issued	159	08/09/2001	DNA ENCODING RAT BOMBESIN RECEPTOR SUBTYPE-3 (BRS-3) AND USES THEREOF	LIU, JIE
60286040	Not Issued	159	04/23/2001	FASTER PARALLEL CONTINUOUS WAVELET TRANSFORM ON RECONFIGURABLE MESHES	LI, JIE
60268780	Not Issued	159	02/14/2001	BICYCLIC PYRIMIDINE MATRIX METALLOPROTEINASE INHIBITORS	LI, JIE JACK
60268756	Not	159	02/14/2001	FUSED PYRIMIDINONE MATRIX	LI, JIE JACK

	Issued			METALLOPROTEINASE INHIBITORS	
60262008	Not Issued	159	01/16/2001	PROPOSAL FOR COLLABORATIVE BT AND 802.11B MAC MECHANISMS FOR ENHANCED COEXISTENCE	LIANG, JIE
60244734	Not Issued	159	10/31/2000	ORGANIC BISTABLE DEVICE AND ORGANIC MEMORY CELLS	LIU, JIE
60214300	Not Issued	159	06/26/2000	PEPTIDES OF MAMMALIAN PROTEINS; METHODS; USES	LIU, JIE
60204308	Not Issued	159	05/15/2000	FORMULATIONS FOR ADMINISTERING CALCITONIN AND PROCESSES FOR PREPARING THE SAME	LIU, JIE
60177433	Not Issued	159	01/21/2000	DIGITAL STILL CAMERA SYSTEM AND METHOD	LIANG, JIE
10690446	Not Issued	020	10/21/2003	RECEIVER WITH LOW POWER LISTEN MODE IN A WIRELESS LOCAL AREA NETWORK	LIANG, JIE
10669612	Not Issued	020	09/24/2003	CONFIGURATION OF A DIRECTORY SYSTEM	LIU, JIE
10662083	Not Issued	020	09/15/2003	COMPOUND ELECTRODES FOR ELECTRONIC DEVICES	LIU, JIE
10655301	Not Issued	020	09/05/2003	SYSTEMS AND METHODS FOR DISTRIBUTED GROUP FORMATION AND MAINTENANCE IN GEOGRAPHICALLY BASED NETWORKS	LIU, JIE
10635976	Not Issued	019	08/07/2003	METHOD FOR FORMING AN ARRAY OF SINGLE-WALL CARBON NANOTUBES IN AN ELECTRIC FIELD AND COMPOSITIONS THEREOF	LIU, JIE
10635067	Not Issued	020	08/05/2003	SYSTEM FOR OPERATIONAL COEXISTENCE OF WIRELESS COMMUNICATION TECHNOLOGIES	LIANG, JIE
10634182	Not Issued	030	08/05/2003	NAPHTHALENE DERIVATIVES AS MATRIX METALLOPROTEINASE INHIBITORS	LI, JIE JACK
10634181	Not Issued	030	08/05/2003	FUSED TETRAHYDROPYRIDINE DERIVATIVES AS MATRIX METALLOPROTEINASE	LI, JIE JACK

				INHIBITORS	
10035075	Not Issued	020	12/28/2001	METHOD FOR CUTTING NANOTUBES	LIU, JIE
10034745	Not Issued	041	12/28/2001	METHOD FOR FORMING AN ARRAY OF SINGLE-WALL CARBON NANOTUBES AND COMPOSITIONS THEREOF	LIU, JIE
10033228	Not Issued	030	12/28/2001	METHOD FOR PRODUCING SELF-ASSEMBLED OBJECTS COMPRISING SINGLE-WALL CARBON NANOTUBES AND COMPOSITIONS THEREOF	LIU, JIE
10033092	Not Issued	030	12/28/2001	METHOD FOR FORMING A PATTERNED ARRAY OF SINGLE-WALL CARBON NANOTUBES	LIU, JIE
10032933	Not Issued	041	12/28/2001	METHOD FOR PURIFICATION OF AS-PRODUCED SINGLE-WALL CARBON NANOTUBES	LIU, JIE
10032732	Not Issued	030	12/28/2001	METHOD FOR GROWING CONTINUOUS FIBER	LIU, JIE
10032726	Not Issued	030	12/28/2001	METHOD FOR GROWING SINGLE-WALL CARBON NANOTUBES UTLIZING SEED MOLECULES	LIU, JIE
10026317	Not Issued	030	12/20/2001	NON-COLLABORATIVE MECHANISMS FOR ENHANCED COEXISTENCE OF WIRELESS NETWORKS	LIANG, JIE
10016260	6528540	150	10/30/2001	ESMOLOL FORMULATION	LIU, JIE
10011221	Not Issued	030	10/25/2001	COLLABORATIVE MECHANISM OF ENHANCED COEXISTENCE OF COLLOCATED WIRELESS NETWORKS	LIANG, JIE
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